



Escaping Thucydides's Trap

Dialogue with Graham Allison
on China-US Relations

Henry Huiyao Wang

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PREFACE

When it comes to China-US relations, nearly everyone has heard of the concept of the Thucydides's Trap. This historical reference is now an inescapable part of the discussion and one of the most frequently cited descriptions of China-US relations. Graham Allison, who coined the term, is one of the world's most renowned political scientists and an influential voice on US strategy and national security. He has particular focuses in nuclear arms, Russia, China, and decision making. Allison has taught at Harvard University for five decades, where he was the founding dean of the Kennedy School of Government and former director of the Belfer Center for Science and International Affairs. He has also served in a number of senior roles in the US government, including Special Advisor to the Secretary of Defense under President Reagan and Assistant Secretary of Defense under President Clinton.

I first met Professor Allison when I was a senior fellow from 2010–2011 at the Harvard University Kennedy School of Government and since then I have had a number of valuable opportunities to have multiple in-depth conversations with him. We have met many times around the world including at Harvard, the Munich Security Conference (MSC), and China Development Forum. I have also invited him and Larry Summers to speak at CCG's headquarters in Beijing and he has also hosted me at the Harvard Kennedy School. During the pandemic, face-to-face exchanges were not possible, but this did not prevent us from continuing our dialogue as we shifted to virtual formats. Professor Allison has taken

the time to participate in several online public discussions under the CCG Global Dialogue series, which were broadcast globally and attracted hundreds of thousands of viewers. After China completely lifted restrictions on travel, Professor Allison visited China again and we both met again at the China Development Forum and the Boao Forum for Asia. On July 31, 2023, to mark the completion of this meaningful book, I made a special trip to visit him in his office at the Kennedy School while I was in the US and we exchanged many views on topics such as China-US relations, great power rivalry, and the future of globalization.

Throughout the many meetings we've had, I continue to be inspired by Professor Allison's far reaching insights, historical perspectives, and clear-eyed analysis of topics that have become increasingly heated as geopolitical tensions have risen, and I never fail to learn new things each time we talk. During MSC 2023, CCG hosted an official side event on climate change cooperation between the US and China titled "Oasis or Mirage: Analyzing China-US Relations on Climate Cooperation." The event welcomed over 40 thought leaders from the US, China, Europe, and Global South countries to discuss US-China relations from the perspectives of climate diplomacy and develop solutions for reducing geopolitical tensions and explore areas for cooperation. Allison gave a keynote speech at the event saying that China-US relations should not be solely defined by competition, but also by cooperation. He emphasized that competition between China and the United States is unavoidable as China's rise challenges the dominance of the United States, and that there is potential for a collision of historical proportions, especially over the Taiwan issue. However, he is confident that cooperation and competition can coexist and suggests that just as much emphasis should be put on cooperation between China and the United States as there is on competition. Both countries need to cooperate to address climate change if they want to survive and outright war between China and the US would be catastrophic for mankind. Allison has often called on China and the US to calm down and avoid conflict, engage in peaceful dialogue and fair competition, and look for more opportunities for cooperation.

As I write these words, scholars and policymakers are growing increasingly concerned about the dynamics and future of the China-US relationship, arguably the most important bilateral relationship of this century. Whether these two great powers can get along will affect not only their own people, economy, and society, but will also have a major impact on the security, peace, and prosperity of the entire world. China and the US

are the two most influential and powerful countries in the world. They are the world's two largest economies and biggest carbon emitters, leading representatives of the developing and developed world, respectively. The world needs the US and China to work together to address global challenges and prevent another cold war. However, whether China and the US can co-exist peacefully remains an open question.

Graham Allison's book, *Destined for War: Can America and China Escape Thucydides's Trap?* has done a great service to the world by exploring this question and warning us of the danger that a seemingly stable world order can fall apart, even though maintaining it is in everyone's interest. Unfortunately, since it was published, Professor Allison's warning has only come to seem more prescient and relevant as tensions on other side of the Pacific have increased. Today, the phrase "Thucydides's Trap" is known by virtually every student and practitioner of international relations and every student and observer of the US-China relationship. However, despite how often the trap is cited, there is still a great deal of misunderstanding about its real argument and implications.

It has never been more important for people in China and the US to engage in sober, objective analysis of geopolitics and the changes reshaping our world and to develop a nuanced understanding of how the other side sees the world. In this endeavor, there I can think of few better guides than Professor Allison.

The American writer Mark Twain once said that "History never repeats itself, but it does often rhyme." This oft-cited insight chimes with the message of Thucydides's Trap. Allison does not argue, as some people have incorrectly claimed, that historical patterns are set in stone and that war between China and the US is inevitable. Rather, he wants to point out that historical experience has shown us over and over that there is a *risk* of war when a rising power threatens to displace a ruling power. Far from encouraging a sense of fatalism, in fact, Thucydides's Trap is a call to action, urging us to take proactive steps that will avoid the tragic outcomes that have occurred so many times in the past. The call to action embodied in Thucydides's Trap has inspired our think tank, as well as many other organizations, scholars, think tank representatives, policymakers, and business leaders on both sides of the Pacific to work for harmonious relations between China and the US, recognizing that competition does not have to mean conflict, and that ultimately, the fates of China and the US are deeply entwined, like "inseparable conjoined twins" as Allison has described it.

I hope that, by making Allison's views accessible to a wider audience in China, this book can make some small contribution toward helping people to recognize this reality, and how, in the age of transnational threats like climate change, pandemics, and nuclear weapons, the relationship between our two countries has both competitive and cooperative elements and is not always a zero-sum game.

The good news is that, thanks to the work of Graham Allison and other scholars in this field, leaders on both sides are now well aware of the Thucydidean dynamic and the dangers that it poses. However, we have yet to come up with a feasible plan to escape "history as usual." This is now the next step of our mission. As Allison reminded us at the end of his 2018 TED talk, what is needed now is a surge of imagination and creativity, informed by history, because, in the end, only those who refuse to study history are condemned to repeat it.

Beijing, China
October 2023

Henry Huiyao Wang, Ph.D.

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ABOUT THE AUTHOR



Henry Huiyao Wang, Ph.D. is the Founder and President of Center for China and Globalization (CCG), a think tank ranked among top 100 think tanks in the world. He is also Dean of the Institute of Development Studies of Southwestern University of Finance and Economics of China, Vice Chairman of China Association for International Economic Cooperation, and a Director of Chinese People's Institute of Foreign Affairs. He is currently a steering committee member of Paris Peace Forum and an advisory board member of Duke Kunshan University. He has served as an expert for the World Bank, IOM, and ILO. He pursued his Ph.D. studies at the University of Western Ontario and the University of Manchester. He is the Chief Editor of the Springer Nature book series China and Globalization Series, Chinese Enterprise Globalization Series and the International Talent Development in China Series. He was Senior Fellow at Harvard Kennedy School and Visiting Fellow at Brookings Institute. His books in English include

Globalizing China (2012); *China Goes Global* (2016); *Handbook on China and Globalization* (2019); *Globalization of Chinese Enterprises* (2020); *Consensus or Conflict?: China and Globalization in the 21st Century* (2021); *The Ebb and Flow of Globalization: Chinese Perspectives on China's Development and Role in the World* (2022); and *Understanding Globalization, Global Gaps, and Power Shifts in the 21st Century: CCG Global Dialogues* (2022).



On July 31, 2023, Dr. Henry Huiyao Wang, and Dr. Mabel Lu Miao, Secretary General of CCG, visited the Harvard Kennedy School and had a discussion with Professor Graham Allison.



On February 14, 2020, the Center for China and Globalization (CCG) organized a dinner with the theme “US-China Cold War? Myth and Reality” in conjunction with the Munich Security Conference. The event was attended by John Kerry, former US Secretary of State, Fu Ying, Deputy Chairwoman of China’s NPC Committee on Foreign Affairs, Graham Allison, Douglas Dillon Professor of Government at Harvard University and Founding Dean of Harvard’s John F. Kennedy School of Government and other distinguished guests who also joined a discussion hosted by Dr. Henry Huiyao Wang, Founder and President of CCG.



On March 22, 2019, Professor Graham Allison gave a speech titled “How to Escape the Thucydides’s Trap” at an event hosted by Dr. Henry Huiyao Wang at CCG’s headquarters in Beijing.



On March 22, 2019, Professor Graham Allison visited CCG's headquarters in Beijing.

INTRODUCTION

THE TRAP IS SET

In August 2012, the Financial Times published an article by Graham Allison titled “Thucydides’s Trap has been sprung in the Pacific.”¹ In this article, the first time the Harvard scholar had used the phrase in print, Allison argued that whether the US and China can escape Thucydides’s Trap is “the defining question about global order in the decades ahead.”

By that time, Allison had already spent quite some time developing the concept of Thucydides’s Trap, which refers to a situation where a rising power rivals a ruling power and their struggle for dominance may eventually end in a war. The phrase “Thucydides’s Trap” first appeared in print in a 2011 article by New York Times correspondent David Sanger, when Allison was quoted in a wide-ranging commentary on Chinese President Hu Jintao’s January 2011 visit to the US.²

On June 6, 2013, on the eve of the first meeting between President Obama and President Xi Jinping as leaders of their respective nations, Allison published another article on Thucydides’s Trap in the New York Times titled “Obama and Xi Must Think Broadly to Avoid a Classic

¹ <https://www.ft.com/content/5d695b5a-ead3-11e1-984b-00144feab49a>.

² <https://www.nytimes.com/2011/01/23/weekinreview/23sanger.html>.

Trap.”³ By this point, the thesis has already captured the attention of leaders in both Washington and Beijing. In November 2013, talking to the Berggruen Institute’s 21st Century Council at the Great Hall of the People in Beijing, President Xi Jinping said “We all need to work together to avoid the Thucydides’s Trap—destructive tensions between an emerging power and established powers, or between established powers themselves.”⁴

In 2015, President Xi told an audience in Seattle that Thucydides’s Trap is not inevitable, and major countries can create such traps for themselves if they make the mistakes of strategic miscalculation.⁵

As the China-US relationship gradually became more fraught, Allison continued to develop the thesis and share his ideas. In September 2015, *The Atlantic* published “The Thucydides’s Trap: Are the US and China headed for War?” in which Allison argued that the historical metaphor of this trap provides the best lens available for illuminating relations between China and the US today.⁶ This article appeared just ahead of the 2015 summit during which Presidents Barack Obama and Xi Jinping discussed the Trap at length. Obama emphasized that despite the structural stress created by China’s rise, “the two countries are capable of managing their disagreements.” At the same time, they acknowledged that, in Xi’s words, “should major countries time and again make the mistakes of strategic miscalculation, they might create such traps for themselves.”⁷

Since that time, the concept of Thucydides’s Trap has become a mainstay in the lexicon of expert commentary and analysis around the world as China’s continued growth, trends and surprises in US domestic politics, and geopolitical upheaval have kept the evolving China-US relationship at the center of global attention. The idea of Thucydides’s Trap became more popular and widely discussed since the election of President Trump

³ <https://www.nytimes.com/2013/06/07/opinion/obama-and-xi-must-think-broadly-to-avoid-a-classic-trap.html>.

⁴ https://www.huffpost.com/entry/xi-jinping-davos_n_4639929.

⁵ http://www.china.org.cn/xivisit2015/2015-09/24/content_36666620.htm.

⁶ <https://www.theatlantic.com/international/archive/2015/09/united-states-china-war-thucydides-trap/406756/>

⁷ Quoted in Allison, Graham. “War Between China and the United States Isn’t Inevitable, But It’s Likely.” *National Post*, March 5, 2018.

in 2016 and the subsequent unfolding of the trade war and increasing tensions between the two great powers.

DESTINED FOR WAR

In 2017, *Destined for War: Can America and China Escape Thucydides's Trap?* was published in English, presenting an extended book-length treatment and development of the concept. The book-length project gave space to provide more background on Professor Allison's ideas and delve into the case file that the Thucydides's Trap Project at Harvard had been developing, drawing "lessons from history" from 16 cases where an ascending power had challenged an established power over the course of history, of which 12 resulted in war. The book devoted entire chapter on the clash between Sparta and Athens in Ancient Greece and Britain and Germany in the First World War. It also presented thumbnail sketches of five other wars from the Thucydides's Trap case file: the clash between Japan and the US in the mid-twentieth century starting with the attack on Pearl Harbor in December 1941, Japan's earlier clashes with Russia and then China in the late 19th and early twentieth centuries, the clash between Germany and France in the mid-nineteenth century that ultimately saw Otto Von Bismarck succeed in his ambition to create a united Germany, the war between England and the Dutch Republic in the mid-to-late seventeenth century, and the war between the growing power of the House of Hapsburg and preeminent France in the first half of the sixteenth century. Importantly, in *Destined for War*, Allison also offered 12 "clues for peace" drawn from history that could help the US and China avoid war with each other. These practical solutions on how to avoid conflict were to become a central theme of Allison's work after the publication of *Destined for War*.

Since the publication of *Destined for War*, Professor Allison has worked tirelessly to make his ideas accessible to a wider audience. He gave lectures around the world and published numerous articles in leading publications such as *Foreign Affairs*, *Foreign Policy*, *Financial Times*, *The National Interest*, *USA Today*, and *The Wall Street Journal*. In September 2018, Professor Allison took the stage at the TED World Theater in New York and gave a talk titled "Is war between China and the US inevitable?" as part of TED's "We the Future" event that explored some of the world's most daunting challenges along with possible solutions. This has gone on to become one of the most popular TED talks on international relations,

receiving over 4.5 million views on the TED official website and another 2.5 million on the TED YouTube channel.

IMPACT OF THUCYDIDES'S TRAP

It is difficult to overstate the impact of the notion of Thucydides's Trap. As described above, long before *Destined for War* was published, Thucydides's Trap had already become an important framework for policymakers in Washington and Beijing to understand US-China relations. As early as 2012, Martin Dempsey, then US Chairman of the Joint Chiefs of Staff, said "I think that one of my jobs as Chairman, and as an adviser to our senior leaders, is to help avoid a Thucydides's Trap. We don't want the fear of a rising China to make war inevitable, so we are going to avoid Thucydides's Trap."⁸

The endorsements for *Destined for War* speak to the book's influence among senior policymakers, reading like a who's-who of US foreign policy.⁹ Joe Biden said, "Graham Allison is one of the keenest observers of international affairs around. He consistently brings his deep understanding of history's currents to today's most difficult challenges and makes our toughest foreign policy dilemmas accessible to experts and everyday citizens alike." The US president has known Graham Allison for decades and regularly sought his counsel as a senator, vice president, and now as president. Other people that endorsed the book included Kurt Campbell, who is now a key shaper of US policy toward China in his role as Coordinator for Indo-Pacific Affairs in the National Security Council. Campbell labeled the book "Essential, even indispensable reading for every diplomat—and financier or businessman—that contemplates China and its relations with the world." Another figure from the Biden administration that praised the book was Samantha Power, now Administrator of the United States Agency for International Development. Other endorsements came from luminaries such as Henry Kissinger, former United States Secretary of State; Kevin Rudd, former Prime Minister of Australia and now Head of the Asia Society Policy Institute; and

⁸ See "A Conversation with General Martin Dempsey," Carnegie Endowment for International Peace, Washington, DC, May 2, 2012; and Martin E. Dempsey, "Remarks and Q&A," Joint Warfighting Conference & Exposition, Virginia Beach, VA, May 16, 2012.

⁹ <https://scribepublications.co.uk/books-authors/books/destined-for-war-9781911617303>.

Klaus Schwab, founder and Chairman of the World Economic Forum. Ban Ki-Moon, former Secretary-General of the United Nations, said that “Graham Allison has been a source of inspiration for me as a student and diplomat.” When Stephen Schwarzman, Chairman and CEO of Blackstone, set up the Schwarzman scholars programmed in 2016, based on an endowment of \$435 million raised with Tsinghua University and modeled on Oxford’s Rhodes scholarships, he framed its mission as helping the Asia Pacific region avoid “Thucydides’s Trap.”¹⁰

As frictions between the world’s two largest economies increased during the Trump presidency, the concept gained traction around the world. In December 2018, Thucydides’s Trap was selected as a “word of the year” by the Financial Times, with chief foreign affairs commentator Gideon Rachman noting how the idea was attracting more widespread public discussion, having already captured the attention of leaders in both Washington and Beijing.¹¹ The idea was discussed by commentators across Asia, including India, Malaysia, the Philippines, and Singapore, with most recognizing the relevance of the idea and expressing hope that the risk of war it warns about can be avoided. In Australia, Malcolm Turnbull made repeated references to the Thucydides’s Trap during his term as Prime Minister from 2015 to 2018, including public pleas to President Xi Jinping and Premier Li Keqiang not to “fall into the Thucydides’s Trap.”¹²

CHINESE PERSPECTIVES ON THE TRAP

In addition to heavily influencing the foreign policy debate in Washington, Professor Allison’s thesis has been widely discussed in Chinese policymaking circles. This is perhaps not surprising, as it neatly encapsulates the challenge that many Chinese policymakers and scholars had also been grappling with since the 2010s began.

For instance, there are parallels between the Thucydides’s Trap concept and the call for a “new model of great power relations” first made by President Hu Jintao in 2011. During the fourth China-US Strategic and

¹⁰ <https://www.ft.com/content/7e4c6f94-755b-11e6-bf48-b372cdb1043a>.

¹¹ <https://www.ft.com/content/0e4ddcf4-fc78-11e8-aebf-99e208d3e521>.

¹² Christopher Mackie, “Malcolm Turnbull, and Thucydides, and All That,” *Sydney Morning Herald*, December 17, 2015.

Economic Dialogues in May 2011, President Hu Jintao elaborated on the importance of a new-type relationship between major countries to be jointly developed by China and the US, a relationship that could be reassuring to both the Chinese and American peoples and to the people across the world. Hu said, “We should prove that the traditional belief that big powers are bound to enter into confrontation and conflicts is wrong, and seek new ways of developing relations between major countries in the era of economic globalization.”¹³ The idea of a new model of great power relations was subsequently used and developed by President Xi Jinping, notably at his Sunnylands Summit with President Obama in 2013. Thucydides’s Trap has struck accord because it chimes with the need for an adjustment in China-US bilateral relations so that destructive patterns of the past can be repeated. The “new model of great power relations” provides a framework to discuss what that adjustment might entail and how a relationship between the US and China in the twenty-first century might differ from the great power relations that have preceded it.

In an interview with the *Global Times*, Professor Allison noted that one of the reasons that President Xi calls for a new form of great power relations is that he understands well that the old form of rivalry between great powers has so often led to war.¹⁴ He mentioned that the Chinese leadership has made its own study of the cases analyzed in *Destined for War: Can the U.S. and China Escape Thucydides’s Trap?* and is intent in coming up with solutions that can avoid the war that typically occurs when a rising power threatens to displace a ruling power.¹⁵

Thucydides’s Trap has been extensively analyzed and discussed in Chinese scholarly and policymaking communities and been studied by a larger audience since the Chinese translation of the book was published in 2019. A keyword search of scholarly articles on CNKI shows that more than 300 articles discussing Thucydides’s Trap have published in different Chinese academic journals.¹⁶ Scholars that have commented extensively on Thucydides’s Trap include leading experts such as Yan Xuetong, Wang Jisi, and Zheng Yongnian, to name but a few.

¹³ Cited in http://us.china-embassy.gov.cn/eng/zmgxss/201207/t20120723_4368168.htm.

¹⁴ <https://www.globaltimes.cn/content/1209820.shtml>.

¹⁵ <https://www.globaltimes.cn/content/1209820.shtml>.

¹⁶ Based on keyword search results from www.cnki.net

Thucydides's Trap has also been a useful starting point of research and debate between Chinese scholars and those from the US and elsewhere. For example, Chinese scholars such as Zhang Chunman, Pu Xiaoyu, Zhang Biao, and Han Zhaoying contributed to a special issue of the *Journal of Chinese Political Science* published in March 2019 on the theme "Can America and China Escape the Thucydides's Trap?" In that issue, these Chinese scholars along with counterparts from the US and elsewhere explored the theoretical mechanisms and policy implications of the Thucydides's Trap, with most agreeing that it provides a useful lens for studying the China-US relationship.¹⁷

Perhaps part of the reason it has struck accord with Chinese analysts is that, unlike some other framings by Western scholars that might be described as promoting the "China threat" theory, Thucydides's Trap does not question the moral consequences of China's rise and does not squarely blame China alone for any escalation of tension. Of course, Allison is writing from an American/Western perspective and naturally foregrounds Western values and US interests in his analysis. One may differ with certain aspects of his argument or characterization of China-US relations, but there is no doubt that he makes a concerted effort to understand China, its views, and its interests. In his book *Destined for War*, Professor Allison devotes several chapters to exploring China's perspective and discusses the validity of China's rise and ambitions for national development—which is not something that can be said of all books by US authors about the US-China relationship.

Naturally, not all Chinese experts agree with Graham Allison's premises or conclusions. However, whether the views expressed by Chinese scholars seek to support, build on, adapt, or refute the Thucydides's Trap thesis, or suggest another framing that might be more applicable, there is no doubt that it has been hugely influential and done a great service by catalyzing research and debate over how to chart a peaceful course for China-US relations.

¹⁷ *Journal of Chinese Political Science*, Volume 24, Issue 1, March 2019, Special Issue: Can America and China Escape the Thucydides Trap? <https://link.springer.com/journal/11366/volumes-and-issues/24-1>.

ALLISON'S BACKGROUND AND CAREER

While Professor Allison has become well known in China mostly since the popularization of the Thucydides's Trap, readers should be aware that this is only the latest of his many other significant contributions to the field. Professor Allison was recognized as one of the leading American political scientists and had an illustrious career in academia and government long before he focused his attention on US-China relations and the dangers of Thucydides's Trap.

Dr. Allison was born and raised in Charlotte, North Carolina. He was educated at Davidson College and then Harvard College, graduating with a B.A. in History in 1962. At Oxford University, he completed his B.A. and M.A. in Philosophy, Politics, and Economics as a Marshall Scholar in 1964. He then came back to Harvard University to earn a Ph.D. in Political Science in 1968. Since then, Graham Allison has taught at Harvard University for five decades, where he is now the Douglas Dillon Professor of Government. Over this time, Professor Allison has cemented his reputation as one of America's foremost analysts of national security, with special interests in nuclear weapons, Russia, China, and decision-making.

Allison is the author of many best-selling books. As a political scientist, he is perhaps best known for his first book, *Essence of Decision: Explaining the Cuban Missile Crisis* (1971), which grew out of his doctoral thesis. This book, which is considered a classic of the field and sold over half a million copies, revolutionized the study of decision-making in political science and other fields. It articulated three models: Model I, the Rational Actor Model, which helped to launch the rational choice school in political science. Professor Allison also set out Model II, the Organizational Process Model, and Model III, the Governmental Politics Model. In setting out these models and showing how causal factors could lead to wars that no rational individual would choose, the book contributed to new ways of thinking about nuclear weapons.¹⁸

Other books that Professor Allison has published included *Nuclear Terrorism: The Ultimate Preventable Catastrophe* (2004), which was selected by the *New York Times* as one of the "100 most notable books of 2004." In 2013, he published *Lee Kuan Yew: The Grand Master's Insights*

¹⁸ Allison, Graham. "Preventing Nuclear War: Schelling's Strategies." *Negotiation Journal*, July 23, 2018.

on China, the United States and the World (2013), which became a best-seller in the US and abroad. Professor Allison cites Lee Kuan Yew as a major influence in his thinking about China and geopolitics and strategy more generally.

In addition to his own scholarly work, Allison has had a major impact in training foreign policymakers and researchers, influencing generations of students, and building up institutions that serve the foreign policy community. He was the “Founding Dean” of Harvard’s John F. Kennedy School of Government from 1977 to 1989. The Kennedy School of Government has trained generations of policymakers. It has also provided trainings to many Chinese officials under an agreement signed in 2002 by the Development Research Center of the State Council (DRC), Tsinghua University and John F. Kennedy School of Harvard.

Professor Allison served as Director of the Kennedy School’s Belfer Center for Science and International Affairs for 22 years from 1995 to 2017, when he was succeeded by former US Secretary of Defense Ash Carter. During that time, the Belfer Center has become Harvard’s preeminent center for foreign policy, national security, science and technology, and a very impactful center featuring some of the world’s top thinkers (and “doers”). The Belfer Center has been ranked as the top university affiliated think tank in the world for several years in a row by the University of Pennsylvania.¹⁹ The Belfer Center’s programs and research projects cover a range of important issues related to national security and foreign policy, including cybersecurity, digital democracy, nuclear proliferation, diplomacy, and terrorism; America’s relationships with Russia, China, and the Middle East; as well as challenges involving energy, innovation, and climate change. The Center is also notable for integrating research and insights from a range of fields and disciplines, including social scientists, natural scientists, technologists, and practitioners in government, diplomacy, the military, and business. Over the years, it has attracted a large number of star experts in science and security. Aside from current director Meghan L. O’Sullivan, these include names like Ehud Barak, Alan Bersin, John Carlin, James Clapper, John Holdren, Laura Holgate, Douglas Lute, Lisa

¹⁹ <https://www.belfercenter.org/publication/belfer-center-named-worlds-best-university-think-tank-0>.

Monaco, Ernest Moniz, Samantha Power, Mike Rogers, Eric Rosenbach, Jake Sullivan, and Jon Wolfsthal.

Perhaps most importantly for the purposes of this book, the Belfer Center has produced many of the reports on US-China relations which are cited in the chapters that follow and is home to the Thucydides's Trap Project, run by Professor Allison, which has undertaken thorough research on this topic, including the file of cases when a major rising power has threatened to displace a major ruling power in the last five hundred years. In addition to the 16 cases used in *Destined for War*, Phase II of the project is reviewing potential additional cases to be included and has invited feedback on the case file.

WORK OUTSIDE HARVARD

Aside from his work at Harvard, Allison has also been a fellow of the Center for Advanced Studies (1973–74); consultant for the RAND Corporation; member of the Council on Foreign Relations; member of the visiting committee on foreign policy studies at the Brookings Institution (1972–77); and a member of the Trilateral Commission (1974–84 and 2018).

In addition to helping shape the debate through his work in academia and think tanks, Professor Allison has also been heavily involved in US policymaking on security and foreign policy by working in a number of roles in government, including working as an advisor and consultant to the Pentagon in the 1960s. He has been a member of the Secretary of Defense's Defense Policy Board Advisory Committee since 1985. Professor Allison was a special advisor to the Secretary of Defense under President Ronald Reagan (1985–87) and Assistant Secretary of Defense for Policy and Plans under President Bill Clinton (1993–1994), where he coordinated strategy and policy toward the states of the former Soviet Union. President Bill Clinton awarded Allison the Defense Medal for Distinguished Public Service, for “reshaping relations with Russia, Ukraine, Belarus, and Kazakhstan to reduce the former Soviet nuclear arsenal.”

In the private sector, Professor Allison has served as a Director of the Getty Oil Company, Natixis, Loomis Sayles, Hansberger, Taubman Centers, Inc., Joule Unlimited, and Belco Oil and Gas, as well as a member of the Advisory Boards of Chase Bank, Chemical Bank, Hydro-Quebec, and the International Energy Corporation.

CCG'S WORK AND RELATIONSHIP WITH PROFESSOR ALLISON

As part of our mission to serve as a bridge between China and the rest of the world, each year, the Center for China and Globalization (CCG) hosts a range of speakers from around the world at its headquarters in Beijing. We have also worked to build various bespoke channels and platforms to enhance dialogue between scholars, business leaders, policymakers, and young people from around the world. This includes an annual program of seminars, workshops, and flagship events such as the China and Globalization Forum, the Inbound-Outbound Forum, the Global Think Tank Innovation Forum and CCG Ambassador's Roundtable. Representatives of CCG also participate in international events to exchange views with people around the world.

Through this work, we have been able to engage Graham Allison in several in-depth discussions in recent years, which are quoted from at length in this book. On March 22, 2019, Graham Allison gave a speech titled "How to Escape the Thucydides's Trap" at an event held at CCG headquarters in Beijing. After the onset of the pandemic, CCG had shifted to holding virtual events and on November 19, 2020, Graham participated in an online seminar during CCG's 6th China and Globalization Forum, where he presented his views on the US election at the time and its impact on China and the world. After that, Professor Allison participated in two more online discussions, which were part of the CCG Global Dialogue series. On April 6, 2021, he took part in a discussion with myself and Chen Li, Director of the Center for International Security and Strategy at the School of International Studies, Renmin University of China, titled "Thucydides's Trap Revisited: Prospects for China-US relations." On March 3, 2022, Professor Allison and I held a discussion on the theme "The Future of Great Power Relations: How Can the US and China Co-Exist?" On February 18, 2023, Graham also provided key input on the future of US-China cooperation on combating climate change at CCG's official side event at the MSC mentioned previously. On July 31, 2023, we met at Harvard University's Kennedy School and discussed our mutual concerns: China-US relations, great power competition and the future of globalization.

We are very grateful to Graham for his willingness to participate in this series of events organized by CCG and greatly value the insights he has

shared with us over the years. This book is based on my in-depth discussions with him and my research on his thoughts contained in the Belfer Center reports, as well as the articles and interviews he has published. However, it should be noted that Graham Allison has not been directly involved in the production of this book. The editorial decisions about what material to include and how to present Allison's views are solely the work of the author and CCG. While we have done our best to represent his views fairly and accurately, given the nature of this method of selectively using quotes from various sources such as articles and interviews to answer questions that have been added post hoc, the quotes presented here are intended to capture key aspects of Professors Allison's views, but should not be taken as his entire or final assessment of any particular question.

AIMS OF THIS BOOK

As discussed above, the work of Graham Allison has attracted considerable attention, particularly since the publication of *Destined for War*. Since then, as relations between China and the US have become yet more complex amidst controversies over trade, the COVID-19 pandemic, and Taiwan, Professor Allison's work on US-China relations has become even more relevant and of greater interest to a broader global audience including policymakers, researchers, and younger generations of readers.

Thucydides's Trap has become a widely cited framing for understanding US-China relations, both internationally and in China within policymaking circles and among the wider public. However, many readers are still unfamiliar with Thucydides's Trap and Professor Allison's broader work on US-China relations, or have only a superficial or inaccurate understanding of the argument and its implications.

For example, one common misconception is that Thucydides's Trap claims that war between a rising and a ruling power, and by extension a war between the US and China, is "inevitable." This a "straw man" that Professor Allison has gone to some lengths to refute, including in the appendix of *Destined for War*, where he points out that four of the 16 cases in the Case File did not result in war. Rather than claiming that war between China and the US is preordained in anyway, Thucydides's Trap is meant as a warning of the possibility that such a great power war could occur, which therefore implies it is our responsibility to make a concerted effort to avoid this unthinkable eventuality. However, this

misunderstanding of Professor Allison's thesis and several others persist in public discourse regarding Thucydides's Trap. Therefore, the first aim of this book is to introduce the idea of Thucydides's Trap to a broader audience in an easily digestible format and address some misunderstandings about Professor Allison's argument.

The second key aim of this book is to update the Thucydides's Trap argument and analysis of US-China relations based on Professor Allison's writings, presentations, and interviews since the publication of *Destined for War*. In particular, since making a persuasive case of the risk of war in his 2017 book, Professor Allison has devoted a lot of energy to exploring "avenues of escape"—ways to avoid such a war. In this book, we hope to summarize Professor Allison's more recent work and the ideas on how to avoid war that he has put forward so far so they can be absorbed, considered, and discussed among decision-makers, scholars, and students.

CONTENTS OF THIS BOOK

Chapters one to three of this book are made from a collection of quotes from Allison's speeches, writings, interviews, and discussions on Thucydides's Trap, China-US relations, and related topics. As mentioned above, this includes three extended discussions he participated in with me in 2019, 2021, and 2022. This book also quotes from *Destined for War* and has extended excerpts from key reports produced by the Belfer Center as part of a major study directed by Graham Allison titled "The Great Rivalry: China vs. the U.S. in the 21st Century," which the Belfer Center has kindly allowed us to use in this book. Regarding the timeframe, the vast majority of these quotes are from Professor Allison's remarks and writings since the publishing of *Destined for War* (2017) up to the summer of 2022, with a few quotes from materials dating back to 2012 where these remain relevant.

To present Professor Allison's views in an accessible format, these quotes are arranged in a question-and-answer format, inspired by the same format that Graham Allison used for his 2013 book *Lee Kuan Yew: The Grand Master's Insights on China, the United States and the World*. Direct quotes from Allison are inset while supplementary comments by the author are italicized for clarity.

The book is divided into thematic chapters. Chapter 1, "Thucydides's Trap Revisited" introduces readers to the "big idea"—the basic premise

of Thucydides's Trap. It answers questions such as who Thucydides actually was, how he understood the causes of war, the distinction between proximate and structural causes, what the "trap" is and how it can lead to war, the lessons of historical experience with respect to Thucydides's Trap, and what relevance Thucydides's Trap has for US-China relations in the twenty-first century.

Chapter 2, "Tectonic Shifts," looks at the underlying structural conditions of the China-US relationship, in particular, what has happened to the relative power of the US and China since the unipolar moment at the end of the Cold War. Drawing on research by Professor Allison's team as part of the Belfer Center's Avoiding Great Power War project, this chapter provides Professor Allison's assessment of the current situation and trends on key aspects of the balance of power and competition between the US and China, namely economics, finance, science and technology, military affairs, and diplomacy. The last section of this chapter explores Professor Allison's views on the implications of these tectonic shifts for the international order and the roles of the US and China within it, including what comes next after the unipolar era, the return of "spheres of influence," the future of globalization, and why the US and China are "condemned to co-exist."

Chapter 3, "Are China and the US Really 'Destined for War'?", moves beyond the structural conditions of the bilateral relationship explored in the previous chapter to probe deeper into the question of a war could really occur between the two sides, especially a war that neither wants. This chapter presents Professor Allison's views on where the bilateral rivalry stands today; factors that could affect the chances of war—such as personalities, ambitions and intentions, and cultural and political factors; and "paths to war"—the potential sparks or sequences of events that could see the US and China come into military conflict.

Chapter 4, "Avenues of Escape," captures some of Professor Allison's views and ideas on how the US and China can escape Thucydides's Trap and avoid the great power war that it warns of. In the quest to find such "avenues of escape," Graham Allison has again turned to history to provide clues on how to prevent war, including delving back into Chinese history and the Cold War, his special field of expertise, for lessons that the leaders of the US and China can take on board as they seek to redefine the relationship and prevent conflict from occurring.

Finally, this book ends with an afterword by the author titled “Beyond Thucydides’s Trap” that points to some other “traps” and historical examples that might be a useful reference for how to chart a peaceful course forward for China-US relations.



CHAPTER 1

Thucydides's Trap Revisited

It was the rise of Athens, and the fear that this instilled in Sparta, that made war inevitable.

—Thucydides

So long as men are men, the future will resemble the past.

—Thucydides

In the West, Thucydides is considered the father and founder of history. He was a former general from the city-state of Athens and wrote what is considered by many Western scholars to be the first-ever history book, The History of the Peloponnesian War. This was a war between Athens and Sparta in the fifth century BCE, a war that engulfed his homeland and in time came to consume almost the entirety of ancient Greece, destroying the two great leading city-states of classical Greece.

Thucydides watched as his home state of Athens rose to challenge the dominant Greek power of the day, the martial city-state of Sparta. He described the horrific toll of the fighting as he observed the hostilities between the two sides. He did not live to see the end of the war. However, this was probably a good thing for Thucydides, as in the end Sparta defeated Athens.

As Professor Allison writes, Thucydides was a pioneer of historiography because he was one of the first writers to document what really happened. Rather than attributing events to the forces of fate or the whims of the gods,

he wrote about events as the results of human choices.¹ When it came to relations among nations, he saw human nature—in particular, the interplay of interests, fear, and honor—as the best lens for understanding. This can be seen as a deeply realist perspective.

HOW DID THUCYDIDES UNDERSTAND THE CAUSES OF THE PELOPONNESIAN WAR?

While others identified an array of contributing causes of the Peloponnesian War, Thucydides went to the heart of the matter. When he turned the spotlight on “the rise of Athens and the fear that this instilled in Sparta,” he identified a primary driver at the root of some of history’s most catastrophic and puzzling wars. Intentions aside, when a rising power threatens to displace a ruling power, the resulting structural stress makes a violent clash the rule, not the exception. It happened between Athens and Sparta in the fifth century BCE, between Germany and Britain a century ago, and almost led to war between the Soviet Union and the United States in the 1950s and 1960s.²

Like so many others, Athens believed its advance to be benign. Over the half century that preceded the conflict, it had emerged as a steeple of civilization. Philosophy, drama, architecture, democracy, history, and naval prowess—Athens had it all, beyond anything previously seen under the sun. Its rapid development began to threaten Sparta, which had grown accustomed to its position as the dominant power on the Peloponnese. As Athenian confidence and pride grew, so too did its demands for respect and expectations that arrangements be revised to reflect new realities of power. These were, Thucydides tells us, natural reactions to its changing station. How could Athenians not believe that their interests deserved more weight? How could Athenians not expect that they should have greater influence in resolving differences?³

But it was also natural, Thucydides explained, that Spartans should see the Athenian claims as unreasonable, and even ungrateful. Who, Spartans

¹ Graham Allison, “The ‘Wonder Woman’ Guide to Avoiding War with China: It Might Take a Woman.” *USA Today*, July 7, 2017.

² *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

³ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

rightly asked, provided the secure environment that allowed Athens to flourish? As Athens swelled with a growing sense of its own importance, and felt entitled to greater say and sway, Sparta reacted with insecurity, fear, and a determination to defend the status quo.⁴

WHAT DOES THUCYDIDES TEACH US ABOUT THE DISTINCTION BETWEEN PROXIMATE AND STRUCTURAL CAUSES?

The complexity of causation in human affairs has vexed philosophers, jurists, and social scientists. In analyzing how wars break out, historians focus primarily on proximate, or immediate, causes. In the case of World War I, these include the assassination of the Hapsburg archduke Franz Ferdinand and the decision by Tsar Nicholas II to mobilize Russian forces against the Central Powers. If the Cuban Missile Crisis had resulted in war, the proximate causes could have been the Soviet submarine captain's decision to fire his torpedoes rather than allow his submarine to sink, or a Turkish pilot's errant choice to fly his nuclear payload to Moscow. Proximate causes for war are undeniably important. But the founder of history believed that the most obvious causes for bloodshed mask even more significant ones. More important than the sparks that lead to war, Thucydides teaches us, are the structural factors that lay its foundations: conditions in which otherwise manageable events can escalate with unforeseeable severity and produce unimaginable consequences.⁵

WHAT IS THE "THUCYDIDES'S TRAP"?

The Thucydides's Trap is a term that I coined six or eight years ago to make vivid Thucydides's insight. This is his idea, not mine. The idea is that when a rising power threatens to displace a ruling power, the outcome is frequently war. And writing about what happened twenty-five hundred years ago, think about it as roughly the time of Confucius, in Greece. Thucydides said famously, it was the rise of Athens, which

⁴ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

⁵ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

rose spectacularly, and the impact that this had and the fear that instilled in Sparta, which had ruled Greece for a hundred years, that caused the war.⁶

Thucydides's Trap refers to the natural, inevitable discombobulation that occurs when a rising power threatens to displace a ruling power. This can happen in any sphere. But its implications are most dangerous in international affairs. For just as the original instance of Thucydides's Trap resulted in a war that brought ancient Greece to its knees, this phenomenon has haunted diplomacy in the millennia since.⁷

WHAT DOES HISTORICAL EXPERIENCE TELL US ABOUT THE DANGER OF THUCYDIDES'S TRAP?

In my book, I look at the last five hundred years of history. There are sixteen times, sixteen cases with a rising power threatening to displace a ruling power. Twelve of these cases ended in war, four did not. I have a discussion of them in the book. Actually, if you go to the Thucydides's Trap website, you just put that up on your screen.⁸ You'll see the cases and the sources and there's disputes about them. But basically, what this suggests, and each case is interestingly different, that in general, whether Athens rises or Germany rises, as a hundred years ago, or China rises today and tries to, as it rises, displaces or disrupts the incumbent, or Sparta and Great Britain which had ruled the world for a hundred years, or even the U.S. after American century, the outcome is violent conflict.

But in four of the cases, there was no war. To say that war is inevitable is a big mistake, it's not inevitable. To say that there's a very serious danger of war is correct. Indeed, more often than not, war is the outcome.⁹

⁶ Graham Allison, "How to Escape the Thucydides's Trap" speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

⁷ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

⁸ Readers can access the full Thucydides's Trap case file compiled by the Belfer Center at <https://www.belfercenter.org/thucydides-trap/case-file>.

⁹ Graham Allison, "How to Escape the Thucydides's Trap" speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

The basic contours of the dynamic Thucydides identified are evident in each of the cases. We see vividly what the Thucydides's Trap Project has identified a "rising power syndrome" and a "ruling power syndrome." The first highlights a rising state's enhanced sense of itself, its interests, and its entitlement to recognition and respect. The second is essentially the mirror image of the first, the established power exhibiting an enlarged sense of fear and insecurity as it faces intimations of "decline." As in sibling rivalries, so too in diplomacy one finds a predictable progression reflected both at the dinner table and at the international conference table. A growing sense of self-importance ("my voice counts") leads to an expectation of recognition and respect ("listen to what I have to say") and a demand for increased impact ("I insist"). Understandably, the established power views the upstart's assertiveness as disrespectful, ungrateful, and even provocative or dangerous.¹⁰

WHAT RELEVANCE DOES THUCYDIDES'S TRAP HAVE TO US-CHINA RELATIONS IN THE TWENTY-FIRST CENTURY?

If Thucydides were watching, he would say that China and the United States are right on script sleepwalking towards what could be the grandest collision in history [...] As Henry Kissinger has noted, [Thucydides's Trap] provides the best lens available for looking through the noise and news of the day to understand the underlying forces at work.¹¹

Thucydides's Trap is the dangerous dynamic that occurs when a rising power threatens to displace a ruling power. Think China and the U.S. today. Is China rising or risen? Yes, it's risen faster, further on more dimensions than any country ever in history, and therefore has arrived. It's also continuing to rise. How is this impacting the U.S.? As China realizes its own dream, it's inevitably and inescapably encroaching on positions

¹⁰ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

¹¹ Graham Allison, "How Trump Could Stumble From a Trade War into a Real War with China." *The National Interest*, April 20, 2018.

and prerogatives for which the U.S. has become accustomed to at the top of every pecking order.¹²

The point which I make in my book, and which I would urge you to think about if you haven't had a chance to look at it, is that the defining feature of the relationship between the US and China today, for as far ahead as I can see, will be a ruthless rivalry. So, a competition in which a rising China—which is seeking to “make China great again” and will continue as it has for a generation, rising, and becoming stronger—and as it does, it will be encroaching on positions and prerogatives that Americans, as the ruling power, have come to believe are naturally their own as number one, at the top of every pecking order.¹³

At the beginning of the century, America was the major trading partner of everybody. By 2021, China is the major trading partner of almost everybody. A generation ago, America was the manufacturing workshop of the world. Today, China is the manufacturer of the world. So, in terms of structural realities, a rising China is impacting a ruling US. In my book, I compare this to a seesaw of power in which China inevitably gets stronger, wealthier, and more powerful. That's the nature of the Thucydides's rivalry. That rise shifts the tectonics of power, the seesaw of power between the rising power and the ruling power [...] I know many Chinese colleagues have not wanted to accept this proposition, saying that China is not really rising, but that it's already risen or that China is different. I would say the best way to think about it is that this is another instance of a pattern that we've seen since Thucydides wrote about Athens and Sparta.¹⁴

As far ahead as the eye can see, the defining question about global order is whether China and the US can escape Thucydides's Trap. Most contests that fit this pattern have ended badly. Over the past five hundred years, in sixteen cases a major rising power has threatened to displace a ruling power. In twelve of those, the result was war. The four cases that

¹² Graham Allison, “How to Escape the Thucydides's Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

¹³ Graham Allison, “Thucydides's Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

¹⁴ Graham Allison, “Thucydides's Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

avoided this outcome did so only because of huge, painful adjustments in attitudes and actions on the part of challenger and challenged alike.

The United States and China can likewise avoid war, but only if they can internalize two difficult truths. First, on the current trajectory, war between the US and China in the decades ahead is not just possible, but much more likely than currently recognized. Indeed, on the historical record, war is more likely than not. By underestimating the danger, moreover, we add to the risk. If leaders in Beijing and Washington keep doing what they have done for the past decade, the US and China will almost certainly wind up at war. Second, war is not inevitable. History shows that major ruling powers can manage relations with rivals, even those that threaten to overtake them, without triggering a war. The record of those successes, as well as the failures, offers many lessons for statesmen today. As George Santayana noted, only those who fail to study history are condemned to repeat it.¹⁵

¹⁵ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.



Tectonic Shifts

The size of China's displacement of the world balance is such that the world must find a new balance. It is not possible to pretend that this is just another big player. This is the biggest player in the history of the world.

—Lee Kuan Yew¹

In the past two decades, China has risen further and faster on more dimensions than any nation in history. As it has done so, it has become a serious rival of what had been the world's sole superpower. To paraphrase former Czech president Vaclav Havel, all this has happened so quickly that we have not yet had time to be astonished.

—Graham Allison²

Rather than obsess over day-to-day headlines and rhetoric coming from Washington and Beijing, Thucydides's insights and the concept of the Thucydides Trap direct us to look at the underlying structural relationship between

¹ Quoted in Graham Allison, "The US-China Relationship After Coronavirus: Clues from History." *COVID-19 and World Order*. Ed. Hal Brands and Francis J. Gavin. Johns Hopkins University Press, 2020, p. 392.

² Graham Allison, "The Great Rivalry: China vs. the U.S. in the 21st Century." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021. <https://www.belfercenter.org/publication/great-rivalry-china-vs-us-21st-century>.

*China and the US, and how both sides must master the stress caused by underlying “tectonic shifts” if they are to build a peaceful relationship. As Professor Allison writes, although “policymakers can deny structural realities, they cannot escape them.”*³

*The most fundamental tectonic shift occurring in our lifetimes is the shift in the global balance of power caused by the rise of China. When he spoke at CCG in 2019, Professor Allison described the structural condition we find ourselves in: “China is rising, and will continue to rise for its own benefit. Meanwhile, the US will try to continue its leadership of the international order, because this has provided seven decades without war between great powers, which has been good for the world, and Americans think it is their mission to continue playing this role. This rivalry creates a risk of conflict.”*⁴

To better understand and document this power shift that has occurred over the last two decades, as part of the Belfer Center’s Avoiding Great Power War project, Professor Allison has directed a major study titled “The Great Rivalry: China vs. the U.S. in the 21st Century.” This research was originally prepared as part of a collection of memos for the new Biden administration after the US presidential election in November 2020 and was later published as a series of Belfer Discussion Papers on key aspects of US-China competition: economics, technology, and military affairs. Each paper takes a rigorous approach to assess the relative power of the US and China, from identifying the best metrics and criteria to compare the two countries in different fields, to summarizing key developments and gauging where the two sides stand in the race today. This chapter presents answers to key questions about the “state of the race” between the US and China in three spheres—economics, technology, and military affairs—and what this means for the world, drawing on key findings from “The Great Rivalry” reports as well as other articles and documents that Professor Allison has published on this topic in recent years.

³ Graham Allison, “Grave New World.” *Foreign Policy*, January 15, 2021.

⁴ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

IS CHINA “RISING” OR “RISEN”?

The answer is “yes.” [...] At the time of the [launch of Reform and Opening in 1978], what percentage of Chinese were struggling to survive on less than two dollars a day? That’s the abject poverty level of the World Bank. Take a guess who knows the answer? What percentage of Chinese had less than two dollars a day? Ninety percent, nine out of every ten. And if you have two dollars a day, most of your day is spent trying to find enough food to eat for you and your family, just barely struggling to survive.

[...] Forty years later, what has happened to this ninety percent? Today, ninety percent has been shrunk to one percent. Ninety-nine percent of Chinese have been raised above [the poverty] level. That is about eight hundred million people. Never before in history have we seen such a miracle in flipping the pyramid of poverty, and Xi Jinping has said by the end of 2020 the number’s going to be zero. This is the World Bank standard, and Hu Chunhua has an assignment from Xi Jinping that by the end of 2020, the number is going to be zero.

Rising or risen? For this Harvard audience, some of you may remember this bridge right outside the Kennedy School and the business school. I can see it out of my office. The construction of this bridge began when I was Dean of the Kennedy School. I quit being dean in 1989. The project started in 2012. It was a two-year project that was said to be finished by 2014, but in 2014 they said it wasn’t finished. Take another year, 2015... They said it would take another year. Tell us when it’s going to be finished... In 2017, it was finally finished three times over budget. There’s a bridge here like this in Beijing, called the Sanyuan bridge, with about twice as many lanes of traffic. I try to drive up when I’m here. In 2016, the government of Beijing decided to renovate it. How long did it take to renovate the Sanyuan bridge? You can go to YouTube and see this, this is also in my TED Talk—the answer is forty-three hours. Forty-three hours! So, as I said to the [Beijing] vice mayor who had been attending a graduate executive program, I said if he would bring a group to Harvard and finish off the Harvard bridge, I would make a small contribution.⁵

⁵ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

WHAT IS THE SIGNIFICANCE OF CHINA'S SUCCESS IN POVERTY ALLEVIATION? WHAT LESSONS CAN BE DRAWN FROM THIS PROGRAM?

In 1978, nine out of every ten Chinese struggled to survive on less than \$2 per day—the World Bank's "extreme poverty line." Today that number is approximately zero. Indeed, in 2004 U.S. Trade Representative Robert Zoellick celebrated China's contribution to the UN Millennium Development Goal to reduce by half the number of people living in extreme poverty. In what he called the "greatest leap to overcome poverty in history," he reported that "between 1981 and 2004, China succeeded in lifting more than half a billion people out of extreme poverty."

Four decades of miracle growth may have created a greater increase in human well-being for more individuals than previously occurred in the more than 4,000 years of China's history.⁶

The Chinese people are rightfully proud of what their individual efforts and the leadership of their government have done. But they also recognize the fact that this was possible only because of the international economic and security order in Asia that the US constructed in the aftermath of World War II and maintained for the past seven decades. That order enabled all the Asian miracles—and none more than modern China itself. Could an understanding that such a remarkable outcome could only have been produced by cooperative actions provide insights into ways the two countries might work together to alleviate the debilitating poverty that continues to grind down billions of people in other parts of the world? And if both could cooperate in such an ennobling and mutually beneficial undertaking, perhaps that experience could stimulate more imagination about other ways each can protect and advance its own vital national interests without war.⁷

⁶ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.," Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 10.

⁷ <http://www.chinadaily.com.cn/a/201808/11/WS5b6e33cfa310add14f38532c.html>.

HOW DO YOU DESCRIBE THE OVERALL STRUCTURAL TREND OF THE US-CHINA RELATIONSHIP?

If we put this against the canvas of history, the best way to clarify what's actually happening in this relationship is that China is rising. As long as China doesn't crash or crack up, it will continue rising. So currently, it has about one-quarter of the per capita GDP of the US, but of course, it also has four times as many people. On the current trajectory, why shouldn't the Chinese be as productive as the South Koreans? Of course, they will be. If they [do become this productive], China will have more than half of the per capita GDP of the US and a GDP twice the size of the US. So, as China rises in every arena, Americans, who have become accustomed to believing we are number one in every competition, will find themselves being overtaken.

At the beginning of the century, America was the major trading partner of everybody. By 2021, China is the major trading partner of almost everybody. A generation ago, America was the manufacturing workshop of the world. Today, China is the manufacturer of the world. So, in terms of structural realities, a rising China is impacting a ruling US.⁸

WHAT HAS HAPPENED TO THE RELATIVE POWER OF THE UNITED STATES AND CHINA SINCE THE US VICTORY IN THE COLD WAR?

In two words: tectonic shift. Never before in history has a rising power ascended so far, so fast, on so many different dimensions. Never before has a ruling power seen its relative position change so quickly.⁹

The major finding [of our research] will not surprise those who have been following this issue: namely, a nation that in most races the U.S. had difficulty finding in our rearview mirror 20 years ago is now on our tail, or to our side, or in some cases a bit ahead of us. The big takeaway for the policy community is that the time has come for us to retire the concept

⁸ Graham Allison, "Thucydides's Trap Revisited: Prospects for China-US Relations." CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

⁹ Graham Allison, "The US-China Relationship After Coronavirus: Clues from History." *COVID-19 and World Order*. Ed. Hal Brands and Francis J. Gavin. Johns Hopkins University Press, 2020, p. 391.

of China as a “near peer competitor” as the Director of National Intelligence’s March 2021 Annual Threat Assessment still insists on calling it. We must recognize that China is now a “full-spectrum peer competitor.” Indeed, it is the most formidable rising rival a ruling power has ever confronted.¹⁰

HOW IS THIS RISING CHINA IMPACTING THE U.S.?

The answer is in every way possible. [...] I made a cartoon for Senator John McCain’s Armed Services Committee in 2014 to help them understand the context of the Obama administration’s major initiative towards Asia. What was the Obama administration’s major initiative towards Asia? Sometimes called a “re-balance” or the “pivot” towards Asia. I had compared the U.S. and China to two kids on the playground sitting on opposite ends of a seesaw, each of them represented by the size of their GDP in purchasing power parity.

In 2004, Chinese was about half the size of the U.S., in 2014, China was slightly larger than the US and by 2024, on the current trajectory, China will be half again larger than the U.S. So as the U.S. has debated the so-called re-balance, which was to put less weight on our left foot, fighting wars in the Middle East in order to put more weight on our right foot in Asia where the future lies, the seesaw has basically moved to lift both feet off the ground. This is the tectonic of power, as GDP has shifted. What does this mean? The answer is a big impact everywhere. But one example is trade. At the beginning of the century, the U.S. was the dominant trading partner of every Asian nation. This is a track from 2017, at which point China is now the dominant trading partner of every Asian nation. So as China rises, it’s inevitably displacing the U.S. propositions and prerogatives that the U.S. is accustomed to as its normal position.¹¹

China is not only rising. It has already risen to a point that it has upended the post-Cold War order: geopolitically, economically, technologically, militarily, diplomatically, and politically [...] The time has come

¹⁰ Graham Allison, “The Great Rivalry: China vs. the U.S. in the 21st Century.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021.

¹¹ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

to recognize China as a full-spectrum peer competitor of the United States. As such, it poses a graver geopolitical challenge than any American living has ever seen.¹²

China poses the most perplexing international challenge to the United States in its 244-year history. Unlike the economically isolated and technologically constrained Soviet Union—whose GDP never reached half that of the United States—China has the resources to grow substantially larger and stronger than the United States. It is therefore not just a twin of Russia that can be treated as another great-power competitor but a rival whose meteoric rise is shifting the fundamental tectonics of power.¹³

WHAT HAS BEEN THE REACTION TO YOUR THESIS IN WASHINGTON? DO YOU GET A SENSE OF ACCEPTANCE ABOUT CHINA'S RISE, OR IS THERE AN UNWILLINGNESS TO GRASP THE EXTENT OF THE SHIFT?

My sense is that the general attitude in Washington is one of general disbelief, even cognitive dissonance. [...] For many Americans, being ‘#1’ is a core part of our identity. Having to cope with a nation that is our equal (and in some arenas has even surpassed us) is a difficult proposition to wrap our heads around. [...] What we face are ‘not a comfortable set of questions, and it is not surprising that many people would prefer to evade them’. But as the line goes: reality consists of stubborn facts that do not depend on whether you believe them. The purpose of my book [*Destined for War*] is to sound an alarm for a Washington that I fear is currently sleepwalking towards war with China. And I think it has been having some success on that front.¹⁴

China's success in adopting its distinctive version of a Party-led market economy, which has overtaken the US to become the largest economy in the world (in terms of purchasing power parity), shocks observers, especially Americans. The thought that another country could become bigger

¹² Graham Allison, “The Geopolitical Olympics: Could China Win Gold?” *The National Interest*, July 29, 2021.

¹³ Graham Allison, “Grave New World.” *Foreign Policy*, January 15, 2021.

¹⁴ Graham Allison, “China, America and the Thucydides's Trap: An Interview with Graham Allison.” *Lowy Institute for International Policy*, August 23, 2017.

and stronger than they are challenges Americans' conception of "ourselves" and "our rightful role" as the leader of the world. But turning a blind eye to China's rise does nothing to diminish the facts.¹⁵

ON ECONOMIC COMPETITION

On the 21st-century chessboard, the balance of economic power has become as important as the balance of military power.

—Graham Allison¹⁶

WHY SHOULD WE PAY ATTENTION TO ECONOMIC MEASURES LIKE GDP IN UNDERSTANDING THE RIVALRY BETWEEN THE US AND CHINA? WHAT IS THE RELATIONSHIP BETWEEN ECONOMIC STRENGTH AND POWER?

Gross domestic product is not everything. But it forms the substructure of power in international relations. It funds a nation's military and intelligence capabilities, technical reach, and economic capacity to affect other nations through imports, exports, investment and cheap loans or grants.¹⁷

While the race is not always to the swift, nor the battle to the strong, nations with larger GDPs have historically exercised greater power in international relations. As Adam Smith taught us, trade enriches both seller and buyer, creating a larger pie for everyone. But it also creates webs of asymmetrical interdependence that advantage some over others. Investments by businesses in manufacturing reflect their judgments about where they can produce the best product at the lowest price. While no one denies that these choices have consequences for the relative manufacturing strength of one nation over another, that is not the business of businesses. Financial firms are rewarded for earning the highest returns at

¹⁵ <http://www.chinadaily.com.cn/a/201808/11/WS5b6e33cfa310add14f38532c.html>.

¹⁶ Graham Allison, "Grave New World." *Foreign Policy*, January 15, 2021.

¹⁷ Graham Allison, "China's Geopolitics Are Pumped Up by Its Economic Success." *Financial Times*, October 4, 2020.

the lowest risk for their clients—without regard to the impact this has on the growth of some nations’ economies at the expense of others.¹⁸

[U]nless China’s economy crashes or its system cracks, it will at some point be able to fund defense and intelligence budgets larger than the United States’. To create a correlation of forces to constrain Beijing’s behavior, Washington will have to attract other countries with heft to its side of the seesaw of power. But this will be much more challenging than during the Cold War. Not only will each potential ally have its own interests, preoccupations, and priorities. For most other nations, China will be the most important economic relationship. Thus, they may align with the United States against China on some security issues while becoming more entangled with China on economic ones.¹⁹

For the U.S. to meet the China challenge, Americans must wake up to the ugly fact: China has already passed us in the race to be the No. 1 economy in the world. [...] The consequences for American security are not difficult to predict. Diverging economic growth will embolden an ever more assertive geopolitical player on the world stage.²⁰

HOW HAS THE RELATIVE BALANCE BETWEEN THE GDP OF THE US AND CHINA CHANGED IN RECENT DECADES?

[I]n what the IMF describes as “the biggest and longest-run economic boom in history,” China’s economy has grown ten-fold during the past two decades, from \$1.2 trillion in 2000 to \$17.7 trillion in 2021. During this period, China has posted real growth rates at an average of 8.7% a year—10.3% in the first decade, and 7.2% in the second. As a result, every four years since the financial crisis of 2008, China has added roughly an economy the size of India to its GDP. By comparison, U.S. GDP grew

¹⁸ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 1.

¹⁹ Graham Allison, “Grave New World.” *Foreign Policy*, January 15, 2021.

²⁰ Graham Allison, “China Is Now the World’s Largest Economy. We Shouldn’t Be Shocked.” *The National Interest*, October 15, 2020.

from \$10.3 trillion in 2000 to \$24.0 trillion by 2021, with real GDP growth averaging just 2% annually during these first two decades.²¹

The US share of global GDP—nearly one-half in 1950—has gone from one-quarter in 1991 to one-seventh today. China has been the chief beneficiary of this transformation. In the past generation, its GDP [in PPP terms] has soared: from 20% of the US level in 1991 to 120% today.²²

ECONOMICALLY, WHEN WILL CHINA OVERTAKE THE US?

When measured by the traditional yardstick—market exchange rate—since 2000, China’s GDP has soared from \$1.2 trillion to \$17.7 trillion. On the current trajectory, it will overtake the U.S. within a decade. By the yardstick both the CIA and the IMF judge to be the best metric for comparing national economies—purchasing power parity—China has already surpassed the U.S. to become the world’s largest economy.²³

If both nations continue on their current trajectories, by 2030, China’s economy will be twice the size of America’s. [...] Painful as it will be, Americans will have to find some way to come to grips with a world in which, at least in some realms, “China is No. 1.”²⁴

Although China faces many internal challenges, there are more reasons to expect this basic economic trend to continue than to bet that it will stop soon. With four times as many citizens as the United States, and if Chinese workers become as productive as Portuguese workers are today (that is, around half as productive as Americans), China will see its GDP rise to double that of the United States.²⁵

²¹ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 9.

²² Graham Allison, “The US-China Relationship After Coronavirus: Clues from History.” *COVID-19 and World Order*. Ed. Hal Brands and Francis J. Gavin. Johns Hopkins University Press, 2020, p. 391.

²³ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 2.

²⁴ Graham Allison, “The Geopolitical Olympics: Could China Win Gold?” *The National Interest*, July 29, 2021.

²⁵ Graham Allison, “The New Spheres of Influence.” *Foreign Affairs*, March/April 2020.

WHAT IS THE BEST METRIC TO MEASURE THE RELATIVE ECONOMIC STRENGTH OF THE US AND CHINA?

Traditionally, economists have used a measure called MER (market exchange rates) to calculate and compare GDP. This comparison assumes that under a market rate of 7 yuan to 1 dollar, 7 yuan buys the same amount of goods in China as \$1 does in the U.S. But as Professor Allison points out in his report “The Great Economic Rivalry,” clearly, that is not the case.

When buying most products, from burgers and smartphones to missiles and naval bases, the Chinese get more bang for each buck. Recognizing this reality, over the past decade, the CIA and the IMF have concluded that there is a better yardstick than market exchange rates (MER) for comparing national economies: purchasing power parity (PPP). PPP compares national economies in terms of how much each nation can buy with its own currency at the prices items sell for in its market.

Explaining its decision to switch from MER to PPP in its annual assessment of national economies, the CIA noted that “GDP at the official exchange rate substantially understates the actual level of China’s output vis-a-vis the rest of the world.” Thus, in its view, PPP “provides the best available starting point for comparisons of economic strength and wellbeing between economies.” The IMF adds that “market rates are more volatile and using them can produce quite large swings in aggregate measures of growth even when growth rates in individual countries are stable.”²⁶

SO, HOW DO THE US AND CHINA COMPARE ECONOMICALLY WHEN USING PPP?

Using PPP, we can compare the relative weight of the American and Chinese economies as if they were two competitors on opposite ends of a seesaw. The conclusion is as obvious as it is painful. When measured by PPP, in 2000, China’s economy was 36% the size of the United States’. In 2020, the IMF found it was 115% the size of the U.S. economy, or

²⁶ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 12.

one-seventh larger. While Presidents Obama, Trump, and now Biden have talked about a historic “pivot” to Asia, the seesaw has shifted to the point that both of America’s feet are dangling entirely off the ground.²⁷

WHO HOLDS THE UPPER HAND ON TRADE? WHAT IS THE SIGNIFICANCE OF AMERICA’S TURN AWAY FROM MULTILATERAL FTAs AND CHINA’S MEMBERSHIP IN NEW TRADE PACTS LIKE RCEP?

When this century began, China was knocking on the door of the WTO and the U.S. was the leading trading partner of most major economies. Today, China has overtaken the U.S. to become the largest trading partner for nearly every major nation.

By 2018, 130 countries traded more with China than they did with the U.S., and more than two-thirds of those countries traded more than twice as much with China. With the launch of the Regional Comprehensive Economic Partnership (RCEP) in January, China has also now surpassed the U.S. as the leader of the world’s largest free trade block.²⁸

In strengthening its hand within the existing world trading system and creating new agreements and blocs, China has also trumped the U.S. In the post-World War II world, the U.S. was the leader in promoting free trade, establishing the GATT, NAFTA, WTO, and more. The U.S. also took the lead in designing the Trans-Pacific Partnership. But because of domestic political opposition, it has been unable to join the agreement. Japan then picked up the baton, and by 2018 the 11 members of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) established new trade rules. At the same time, China enlisted most major Asian economies in establishing the Regional Comprehensive Economic Partnership (RCEP). RCEP creates a trading bloc that includes China, Japan, South Korea, Australia, New Zealand and the 10 members of ASEAN, covering 2.2 billion people. This new bloc is now the largest in the world. It encompasses nearly one-third of global GDP

²⁷ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 12.

²⁸ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 14.

and is projected to add \$500 billion to world trade by 2030. Moreover, while the US remains paralyzed by political divisions that leave it stuck on the sidelines, China has now applied to join the CPTPP.²⁹

At the same time, it is important to note that China also depends on foreign supply chains for essential items. China is the world's largest importer of food and energy, and its exports to the U.S. and other high-income countries play a central role in its economy. Together these advanced economies account for a larger share of world trade than China. Thus, as Martin Wolf of the *Financial Times* has argued, if the U.S. and its G7 partners were able to act in concert, they could insist on rules for trade and finance to establish a level playing field that China would have to accept. Had previous American administrations joined the Trans-Pacific Partnership and EU-focused Transatlantic Trade and Investment Partnership (TTIP), for example, the U.S. would have been the architect of an economic coalition with nearly 60% of world GDP sitting on its side of the seesaw, lifting a China with 16% off the ground.³⁰

CHINA MAY TRADE MORE THAN THE US, BUT DOESN'T THE US RETAIN A LARGE ADVANTAGE IN TERMS OF THE STRENGTH OF ITS MULTINATIONAL CORPORATIONS?

While US MNCs have long been dominant in the global economy, in recent years, Chinese MNCs have risen in size and capability. As Professor Allison points on in his report "The Great Economic Rivalry," the race for corporate dominance is far from over.

In an eye-grabbing headline, *Fortune* announced [in 2020] that the "Global 500 is now more Chinese than American." For the first time since the magazine began listing its Global 500 rankings, China topped the list with 124 companies—ahead of the U.S.'s 121. Twenty years ago, this list included only ten Chinese companies (today, China and the U.S.

²⁹ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, pp. 16–17.

³⁰ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 22.

each account for almost as many companies as the total number for Japan, Britain, France, and Germany combined).

However, there are still important differences between US and Chinese MNCs in terms of profitability, branding, sectoral focus, and ownership:

On *Fortune's* Global 500, U.S. companies lead by revenue—U.S. companies' revenue topped nearly \$10 trillion in 2020, compared to Chinese companies' reported \$8.3 trillion.

American brands also continue to outshine Chinese ones. According to Brand Finance, the aggregate value of U.S. companies' brands was more than twice that of Chinese brands (\$3.2 trillion to China's \$1.3 trillion). And the U.S. still boasts the largest number of 'unicorns'—startups valued at more than \$1 billion [...] The companies in *Fortune's* 500 also differ significantly in their corporate structure and focus. Three quarters of China's companies on the *Fortune* list are State Owned Enterprises, and over half are related to the finance, energy, and materials sectors, which partially explains why top Chinese companies underperform relative to American firms in terms of profit margins. Still, though private firms make up a smaller portion of China's major companies, they have been the driving force in China's economic miracle. Together, private firms account for 60% of China's GDP growth, 70% of innovation, 80% of urban employment, and 90% of job growth.³¹

WHICH COUNTRY ATTRACTS THE MOST FOREIGN INVESTMENT?

Over the past 20 years, China has grown to rival the U.S. as the preferred destination for FDI and became the largest FDI recipient in the world in 2020 amidst the coronavirus pandemic. From 2000–2020, inflow of FDI into China grew four-fold, from \$41 billion in 2000 to \$163 billion in 2020. By contrast, U.S. FDI inflows have fluctuated over the past two decades and saw a net decline of \$180 billion from 2000–2020. In terms of the total cumulative level of FDI, however, the U.S. remains

³¹ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.," Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 26.

substantially ahead, with five times the value of FDI inward stock as of 2019.³²

IS CHINA'S CONTINUED ECONOMIC RISE INEVITABLE? WHAT COULD DERAIL CHINA FROM ITS CURRENT GROWTH TRAJECTORY?

In "The Great Economic Rivalry," Professor Allison identifies several issues facing China's economy, including political uncertainty, challenges facing the private sector, demographics, debt, environmental issues, and geopolitics.

Most [sceptics over China's economic outlook] begin by highlighting new risks caused by the government's recent overreach into the private sector [...] The campaign against big tech erased more than \$1.5 trillion from the value of Chinese stocks in the past year and spurred backdoor capital flight.³³

The "no" sayers also emphasize the three structural "D"s at the top of Vice Premier Liu He's list of "17 insurmountable challenges:" demographics, debt, and serious damage to the environment. With a population that is peaking and aging, as the cliché goes: China could grow old before it gets rich. On current trends, its workforce could shrink by 200 million by 2035. Over the decade and a half since the great financial crisis, China's total debt (both government and private) has doubled from 140% of GDP to 280%. The ongoing collapse of Evergrande is just the tip of the iceberg of a property bubble. And China's single-minded focus on economic growth without much attention to externalities has left deep scars on the environment.³⁴

³² Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 27.

³³ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 39.

³⁴ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 40.

China's economy faces additional potential headwinds from growing hostility from the U.S. and other countries that could impact their willingness to depend on China for products or to invest in its future growth. According to the chief China economist at the world's largest wealth manager—UBS—the “biggest risk to China's outlook in the next few years” comes from “rising geopolitical tensions, especially the worsening U.S.-China relationship.” Trade wars could result in selective decoupling from China, reducing opportunities for technology transfer, limiting Chinese firms' investment options, and slowing the flow of capital into China.³⁵

GIVEN THESE CHALLENGES, WHY SHOULD WE EXPECT CHINA TO REMAIN ON A SOLID GROWTH TRAJECTORY?

Policy Track Record

While China faces daunting challenges today, it faced daunting challenges a decade ago, and a decade before that. Its track record in “surmounting the insurmountable,” as some Chinese put it, is hard to deny. Moreover, the team that China's government has addressing these challenges has analyzed them in greater detail and with more insight than any Western expert we have read. [...] The competence of Xi's team, on the one hand, and the instruments their authoritarian government has available for addressing them, on the other, gives China more degrees of freedom to meet challenges than most other governments.³⁶

China's Role in Global Supply Chains

[O] ptimists about China's future economic prospects point to China's success in strengthening its position as the most critical link in vital global supply chains. Despite the rhetoric about decoupling, foreign

³⁵ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 40.

³⁶ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 41.

economies have become more dependent on China during the coronavirus pandemic, not less. China's trade surplus with the world hit a record \$675 billion in 2021, a 60% increase from pre-pandemic levels in 2019. [...] China is now the world's largest manufacturer and exporter of scores of essential goods, including 90% of refined rare earth minerals, 80% of solar panels, 50% of computers, and 45% of electric vehicles. Despite China's worsening geopolitical relations with other major nations, fear of economic consequences will, they believe, deter most companies and countries from joining any serious effort to constrain China's economy.³⁷

China's Growing Consumer Market and the Positive Evaluation of Foreign Investors

Over the past several years, including 2021, the world's most successful technology, manufacturing, and investment firms have doubled down on their bets on China—despite worsening U.S.–China geopolitical relations. China's middle class currently numbers 400 million and is expected to grow by an additional 400 million by 2035. This will unleash a wave of consumer spending that will make China not only most companies' preferred location for production, but also their largest consumers market. In 2021, nearly half of the one million EVs produced by Tesla were made in its Shanghai factory and sold to Chinese buyers. In Elon Musk's words: "China in the long term will be our biggest market, both where we make the most number of vehicles and where we have the most number of customers." This view is shared by the CEO of the world's most valuable company by market share, who says directly: "We are investing in China not just for next quarter or the quarter after, but for the decades ahead...China will be Apple's top market in the world." The world's largest coffee chain—Starbucks—is now opening a new store in China every twelve hours. And the world's largest asset manager with \$10 trillion of assets under management (BlackRock), the largest hedge fund in the world (Bridgewater), and leading international banks including

³⁷ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 42.

Goldman Sachs and JPMorgan have all also increased their stake in China throughout the last two years.³⁸

ON FINANCIAL COMPETITION

When it comes to comparing the strength and global influence of the US and China, one area that is commonly cited as an advantage for the US is finance. The US remains the uncontested leader of the global financial system. However, as Professor Allison's recent research program has highlighted, while the US remains far ahead in key areas, China is catching up in others.

IS THE POSITION OF THE US DOLLAR AS THE WORLD'S RESERVE CURRENCY UNASSAILABLE? HOW MUCH PROGRESS HAS BEEN MADE IN THE INTERNATIONALIZATION OF THE RMB?

Central banks around the world continue to hold most of their reserves in U.S. dollars. The dollar accounts for 60% of total foreign exchange reserves, down from 70% at the beginning of the century. While the IMF added China's RMB to the Special Drawing Rights valuation basket in 2016, it has barely cracked 2% in holdings. Similarly, U.S. dollar centrality persists in terms of share of forex trading, global payments, and trade [...]. We must also remember that America's dollar dominance is not a fact of nature. As the IMF noted in 2018: "the international monetary system's transition from a bi-polar system—in which two currency blocs dominate, i.e., the dollar and euro—to a tri-polar one—which includes the renminbi bloc—is well underway... [with] the economic size of the RMB bloc...at this stage geographically constrained" mainly around BRICS countries.[...] On the other hand, as long as the RMB is not freely

³⁸ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, pp. 42–43.

convertible and China keeps its capital account closed, holdings of RMBs will be slow to rise.³⁹

WHAT DO CHINA'S ADVANCES IN DIGITAL CURRENCY AND FINTECH MEAN FOR THE DOMINANCE OF THE US DOLLAR?

China's success in advancing fintech adds another level of complexity to this picture [of continued USD dominance]. While American policymakers have only begun debating the introduction of a digital dollar, China is leading a national campaign to digitalize its entire economy. China is in the process of developing its own digital currency, the eCNY, which will lead to faster, cheaper, and more secure financial transactions for its citizens. The national effort is complemented by private sector endeavors, with dozens of Chinese tech and financial firms designing new applications to support the government's eCNY architecture. China's early start in developing digital currencies threatens American dominance in international finance. A digital yuan could offer traders an easy way to reroute transactions and bypass the dollar-based system. China could also see its technologies adopted internationally and dictate the rules of digital financial practices around the world.⁴⁰

WHAT STRENGTH DOES THE US DERIVE FROM THE DOMINANCE OF THE DOLLAR? COULD IT BE USED AS LEVERAGE AGAINST CHINA?

While recent U.S. policy has “weaponized” the dollar in sanctioning North Korea, Iran, and Russia, whether this tool could be used to influence China is a subject of debate. U.S.-China economic relations have become so interdependent that they create an analogue of MAD that has been labeled MAED: mutual assured economic disruption. If the U.S.

³⁹ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 31.

⁴⁰ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 32.

tried to exclude China from the U.S.-centered financial system, and China responded by stopping the shipment of goods to the U.S., leaving the shelves in Walmarts, Home Depots, and Targets empty, both economies and societies would be deeply disrupted. A competition to see who could suffer more and for longer has been, at least so far, a game of chicken neither has been willing to play.⁴¹

HOW DO THE TWO COUNTRIES COMPARE IN OTHER ASPECTS OF FINANCE SUCH AS EQUITY MARKETS, BANKING, AND VENTURE CAPITAL?

While American stock markets still account for more than half the world's equity markets, China's domestic markets have grown over 2,500% since the beginning of the century, from little more than \$500 billion in market capitalization in 2003 to \$14 trillion by the end of 2021. Nonetheless, Chinese markets remain a distant second to the U.S. stock market value of \$53 trillion.

China's rise in the banking industry is more striking. In 2000, China had no entries in the top 10 global banks. Today the four largest banks are Chinese (with assets valued at a combined total of \$17.3 trillion as of December 2020). U.S. banks hold only the sixth and ninth spots in this top 10 rankings, for a combined total of \$6.2 trillion in assets. By market capitalization, however, Americans maintain the lead, with American banks ranking first, second, fifth, and seventh.

In the "third great institution of modern capitalism"—venture capital—Chinese firms are still far behind their American counterparts in their ability to attract new investors and capital. In 2020, Chinese start-ups only received half the total venture-capital deal value of American firms. [...] Xi's economic crackdown in 2021 further depressed that ratio to one-third. In its ability to unleash human potential and innovation, the United States is still unmatched.⁴²

⁴¹ Ibid., p. 31.

⁴² Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 34.

WHAT DOES CHINA'S ECONOMIC RISE MEAN FOR ASIA AND THE REST OF THE WORLD?

In Asia, the economic balance of power has tilted especially dramatically in China's favor. As the world's largest exporter and second-largest importer, China is the top trading partner of every other major Asian country, including US allies. And as an aggressive practitioner of economic statecraft, Beijing does not hesitate to use the leverage this provides, squeezing countries such as the Philippines and South Korea when they resist Chinese demands. A similar story is emerging in Europe.⁴³

In Lee Kuan Yew's apt analysis: "China is sucking the Southeast Asian countries into its economic system because of its vast market and growing purchasing power. Japan and South Korea will inevitably be sucked in as well. It just absorbs countries without having to use force...China's growing economic sway will be very difficult to fight." That great sucking dynamic has now reached most of the major economies in the world. In sum: in the Chinese version of the Golden Rule, He who has the gold, rules.⁴⁴

What this means for global geopolitics is profound. At the end of World War II and for the decade that followed, the U.S. accounted for roughly half of global GDP. From this position of dominance, the U.S. took the lead in creating the IMF, the World Bank, the Bretton Woods monetary system, the GATT trading system, and the rest of what became the global economic order. When establishing alliances like NATO, CENTO, and SEATO, the U.S. could cover the costs without thinking about burden-sharing. But by the end of the Cold War in 1991, America's share of global GDP had shrunk to one-fifth. Today it stands at one-sixth [...] China's rise has created a new world economic order.⁴⁵

Lee Kuan Yew foresaw a twenty-first century in which the balance of economic power would be as important as the balance of military

⁴³ Graham Allison, "Beyond Trade: The Confrontation Between the U.S. and China." *The Security Times*, February 2020.

⁴⁴ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 16.

⁴⁵ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 5.

power. Leaders' mandates to govern increasingly depend on their ability to deliver improvements in their citizens' economic well-being. (Thus the recurring refrain from U.S. allies and friends who say: do not try to make us choose between our relationship with the U.S., which is essential for our security, and our relationship with China, which is essential for our prosperity.) It is not surprising, therefore, that China has chosen commerce as its preferred instrument for advancing its interests in the world. As Robert Blackwill and Jennifer Harris' *War by Other Means* argues persuasively, China is "the world's leading practitioner of geoeconomics." It has demonstrated mastery in orchestrating all instruments of economic power to coerce target states, even when the international system is on their side.⁴⁶

ON TECHNOLOGICAL COMPETITION

Technological innovation has become the main battleground of the global playing field, and competition for tech dominance will grow unprecedentedly fierce.

—President Xi Jinping, 2021⁴⁷

Technology: the main arena for competition and rivalry with China.

—William Burns, CIA Director, 2021⁴⁸

As part of the major study titled "The Great Rivalry: China vs. the U.S. in the 21st Century," in December 2021, Professor Allison's team released a report that tracks the rise of China's technological capabilities and relative strength compared to the US across a number of fields, concluding that China has made such extraordinary leaps that it is now a "full-spectrum peer competitor."⁴⁹ As Professor Allison points out, advances in fields like

⁴⁶ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, "The Great Economic Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 6.

⁴⁷ <https://www.ft.com/content/aef33e33-523d-4360-981a-2dace579d9b5>.

⁴⁸ <https://www.npr.org/2021/07/22/1017900583/transcript-nprs-full-conversation-with-cia-director-william-burns>.

⁴⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 3.

AI and 5G are important in their own right, but because they also fuel economic growth, innovation can provide both financial and technological support for military strength.

HOW WOULD YOU COMPARE THE OVERALL TECHNOLOGICAL STRENGTH OF THE U.S. AND CHINA TODAY?

A country that the U.S. could not even find in our review mirror, 21 years ago, because it was so far behind—we can’t find it our rear view here today, because it’s either beside us or slightly ahead of us. We look across the spectrum of technology, but then drill down on six frontier technologies [such as] 5G, AI, quantum, synthetic biology [...] basically, what it shows is that China has made huge leaps forward in becoming a serious rival in almost every technological arena.⁵⁰

[A]lthough the U.S. has led the past half-century of technological innovation and still retains dominance in several other technological fields, China has emerged as a serious peer competitor in the foundational technologies of the twenty-first century whose applications promise to be transformative in arenas from intelligence and military power to economic growth and governance.⁵¹

China’s whole-of-society approach is challenging America’s traditional advantages in the macro-drivers of the technological competition, including its technology talent pipeline, R&D ecosystem, and national policies. As the National Security Council’s Senior Director for Technology and National Security Tarun Chhabra and the Center for Security and Emerging Technologies have recognized, “The United States is no longer the global science and technology (S&T) hegemon.”⁵²

Today, China’s rapid rise to challenge U.S. dominance of technology’s commanding heights has captured America’s attention. The rivalry

⁵⁰ Graham Allison, “The Future of Great Power Relations: How Can the U.S. and China Co-exist?” CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

⁵¹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 40.

⁵² Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 4.

in technology is what the Director of the Central Intelligence Agency, Bill Burns, spotlights as the “main arena for competition and rivalry with China.”⁵³

HOW WILL TECHNOLOGY COMPETITION SHAPE THE RELATIONSHIP OVER THE NEXT DECADE AND WHAT ARE THE RAMIFICATIONS FOR THE ECONOMIES OF THE U.S. AND CHINA?

The race to dominate advanced technologies is at the heart of the U.S.-China rivalry and will be an expanding frontier of conflict. At a pace no one imagined, China has emerged as a serious peer competitor in most tech races including artificial intelligence (AI). On current trajectories, in the next decade China could overtake the U.S. in several technology segments. Science-driven technologies will be key drivers of economic growth and have significant implications. This is thus destined to become an arena of even greater debate.⁵⁴

IS TECH COMPETITION BETWEEN THE US AND CHINA NECESSARILY A BAD THING?

Now, competition is, at least in economics, a good thing. Competition in Olympics and athletics is a good thing. I run faster if I’m running against somebody, a competitor, than I do when running alone. So how then to recognize the win-win component of constructive competition, and nonetheless, at the same time, recognize that at the end of the day, the party that wins the race, for example in 5G, will have advantages economically and in security terms, in their rivalry with the other competitor? So this is back to this contradiction again. On the one hand, the competition can be constructive and positive and have benefits, at the same time, in a geopolitical rivalry where I would rather the rules for the Internet be

⁵³ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 2.

⁵⁴ <https://www.credit-suisse.com/microsites/conferences/china-investment-conference/en/blog/graham-allison-science-driven-technologies-will-be-key-drivers-of-economic-growth.html>.

written by the U.S., and my Chinese colleague might prefer them to be written by China. That's the competitive side of it. And I think we will have to be smart enough to hold these two contradictory impulses in our heads and in our guts at the same time and still function.⁵⁵

Key Technology 1: Artificial Intelligence (AI)

Artificial intelligence looms large in discussions of U.S.-China tech competition. While still in their infancy, many experts believe that AI technologies will be key drivers of national security and economic growth. Rather than a single technology, AI is a broad term that covers machine learning, big data, and various other related technologies that allow machines to act “intelligently.” AI is one of the key technologies that Professor Allison’s team has researched to understand the how the technology rivalry between the U.S. and China will unfold.

WHY IS AI SO IMPORTANT? WHAT SIGNIFICANCE DOES AI HAVE FOR THE MILITARY REALM?

Chinese strategists believe AI may be decisive in Beijing’s campaign to surpass the U.S. as the world’s premier military power. Former Chairman of the Joint Chiefs of Staff General Joseph Dunford concurred: “Whoever has the competitive advantage in artificial intelligence and can field systems informed by artificial intelligence, could very well have an overall competitive advantage.” AI functions as a force multiplier by improving vision and targeting, mitigating manpower issues, hardening cyber defenses, and accelerating decision-making.⁵⁶

The demonstrated success of AlphaGo, and more recently, AlphaStar, in defeating all competitors in one of the world’s most complex real-time strategy video games suggests that in any structured contest between offense and defense, AI will dominate humans. The company, country or team with the best AI will win. As an example, consider American football. In what commentators often discuss as a “chess match,” the offense and

⁵⁵ Graham Allison, “The Future of Great Power Relations: How Can the US and China Co-exist?” CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

⁵⁶ Graham Allison and Jonah Glick-Unterman, “The Great Military Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, p. 18.

defense coordinators know that if the defense guesses correctly whether the next play will be a pass or a run, most NFL teams' defenses can successfully stop most opponents' offense. Reading all the variables in a situation, AI should be able to tilt the scales on the field—or in analogous military competitions on land, sea, and in the air and space.⁵⁷

WHAT IS THE CURRENT STATE OF THE AI RACE BETWEEN THE U.S. AND CHINA?

In the advanced technology likely to have the greatest impact on economics and security in the decade ahead—AI—Eric Schmidt, the former CEO of Google, states unambiguously: China is now a “full-spectrum peer competitor.” China’s AI surge is so recent that anyone not watching closely has likely missed it. Indeed, in many races, China has already overtaken the U.S. to become the world’s undisputed No. 1. Key indicators in the AI race include product market tests, financial market tests, research publications, patents, and results in international competitions.⁵⁸

Six years ago, two of the world’s twenty most valuable internet companies were Chinese; today, seven are. Google, Amazon, Facebook, Microsoft, Baidu, Alibaba, and Tencent—the “Seven Giants of the AI age”—are split on either side of the Pacific. Of every ten venture capital dollars invested in AI in 2018, five went to Chinese startups; four to American firms. Of the world’s top ten most valuable AI startups, seven are American and three are Chinese.⁵⁹

Chinese investments in AI research and development have surged to American levels, and the results are beginning to show. The reality is that China is laying the intellectual groundwork for a generational advantage in AI. The Air Force’s former Chief Software Officer, Nicolas Chaillan, even went so far as to claim that China’s victory in the AI race is “already

⁵⁷ Graham Allison and Eric Schmidt, “Is China Beating the U.S. to AI Supremacy?” Paper, August, 2020.

⁵⁸ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 5.

⁵⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 6.

a done deal.” Last year, China overtook the U.S. for overall AI citations, with a 35% increase from 2019.⁶⁰

WHAT ARE AMERICA’S ADVANTAGES IN THE AI RACE?

In the seeking to improve and advance the most advanced of technologies, the brightest 0.0001% of individuals make the difference. The United States can succeed by recruiting talent from all 7.7 billion people on Earth and enabling these individuals to realize their full potential. In fact, U.S. companies have now recruited more than half of the top 100 recognized AI geniuses. In sharp contrast, China is a closed society—limited essentially to 1.4 billion Chinese speakers. Just 1000 foreign born individuals became Chinese citizens last year. So while the United States will not win competitions in which bulk numbers are the dominant factor, where brilliance, creativity and innovation matter most, the United States has a decisive advantage.

[P]latforms matter. Here the United States begins with a huge sustainable competitive advantage: English is the universal language for science, business and the web. Chinese face the choice of either speaking English, or simply talking to themselves. Not only do the Chinese, but also the French and others often complain that this is unfair—and it may be. But it is a fact. To transform Singapore from a third-world city into one of the world’s most successful and prosperous global trading hubs, Lee Kuan Yew insisted on making English its first language. (Indeed, at one point in counseling Chinese leaders, he suggested that China make English its first language.) Today, more than half of the 7.5 billion people on Earth speak English—and another billion are seeking to learn.

American companies have a significant first mover advantage in the establishment of the major platforms in AI, including operating systems (Android and Apple), design of advanced semiconductors (ARM), and killer apps—including Instagram, YouTube and Facebook. Instagram has 1 billion monthly active users; Facebook more than 2.4 billion. While Chinese competitors will certainly attempt to displace the current leaders in both platforms and applications, if American companies are smart enough to continue enlarging their users’ opportunities, improving their

⁶⁰ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 6.

experiences, and expanding the number of people using their platforms and applications, Chinese and others who want to speak to the world could have to continue relying on U.S.-dominated platforms.⁶¹

WHAT CHALLENGES DOES THE US FACE IN AI DEVELOPMENT?

American AI faces serious headwinds, including a culture that values privacy over security, distrusts authority and is suspicious of government; its companies are wary of working with the U.S. Defense Department and intelligence agencies; dysfunctional public policies inhibiting recruitment and immigration; laws that make it difficult to compile big data sets; and the prospect of further regulations and antitrust action against the companies that are now America's national champions—and are driving American advances in this arena.⁶²

WHAT ARE CHINA'S ADVANTAGES IN THE AI RACE?

In his report on the race for AI supremacy, Professor Allison highlights five advantages that China has for AI development: population and data abundance, fintech, its large talent pool of STEM graduates, greater cultural acceptance of data gathering and AI applications, and strong government support.

Population and Data Abundance

Because a primary asset in applying AI is the quantity of quality data, China has emerged as the Saudi Arabia of the twenty-first century's most valuable commodity.⁶³

In the longer-term competition, China's advantages begin with its population of 1.4 billion that creates an unparalleled pool of data and talent, the largest domestic market in the world, and information collected

⁶¹ Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August, 2020.

⁶² Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August, 2020.

⁶³ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 8.

by companies and government in a culture that values security over privacy. Its commitment to education creates an army of less expensive labor willing and able to spend substantial amounts of time cleaning data sets. Its universities are graduating computer scientists in multiples of their American counterparts, all of them eager to develop algorithms to solve social problems. Because a primary asset in applying AI is the quantity of quality data, China has emerged as the Saudi Arabia of the twenty-first century's most valuable commodity. The total data created, captured and copied in China is already far greater than in the United States. In addition, the country has hungry entrepreneurs like Alibaba's Jack Ma and Tencent's Pony Ma; a government that is leading a whole-of-nation campaign to become the world's leader in AI; and a national sense that China's time has come.⁶⁴

Fintech

In fintech, China stands alone. Tencent's WeChat Pay has nine hundred million Chinese users, while Apple Pay only has 22 million in the United States. And when it comes to capability, WeChat Pay can do much more than Apple Pay. Chinese consumers use their app to buy coffee at Starbucks and new products from Alibaba, pay bills, transfer money, take out loans, make investments, donate to charity and manage their bank accounts. In doing so, they generate a treasure trove of granular data about individual consumer behavior that AI systems use to make better assessments of individuals' creditworthiness, interest in products, capacity to pay for them and other behavior. In mobile payments, Chinese spend \$50 for every dollar Americans spend, in total, \$19 trillion in 2018. U.S. mobile payments have yet to reach \$1 trillion.⁶⁵

Talent

In AI, brain power matters more than computing power. China annually graduates four times as many STEM students than the United States (1.3 million vs. 300,000) and three times as many computer scientists

⁶⁴ Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August, 2020.

⁶⁵ Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August, 2020.

(185,000 vs. 65,000). In the *U.S. News & World Report* ranks, China's Tsinghua University is number one in the world in computer science. Of every ten computer science Ph.Ds graduating in the United States today, three are American and two are Chinese. Three decades ago, only one of every twenty Chinese students studying abroad returned home. Now, four of every five do.⁶⁶

Cultural Acceptance

Culturally, many Chinese embrace what many Americans see as a nightmare “surveillance state.” Even for applications that will clearly improve public health and safety, Americans are evenly split between those who are “very willing” and those who are “very unwilling” to share personal data. In China, the willing outnumber the unwilling five to one. As an American-educated Chinese colleague observed, Chinese are as puzzled by Americans’ acceptance of monthly mass shootings as much as Americans are puzzled by Chinese acceptance of a government surveillance that keeps them and their families safe from such horrors.

China’s government, laws and regulations, public attitudes about privacy, and thick cooperation between companies and their government are all green lights for its advance of AI. In the United States and Europe, yellow and red lights abound.⁶⁷

Government Support

AI is a central pillar in [President Xi’s] agenda to “make China great again.” In a process that reminds careful observers of the leadership of Amazon and Google, he has defined key performance indicators for its development, provided massive funding for specific projects, and done whatever possible to create favorable tailwinds. Wherever the Chinese government can protect companies (in its domestic market), support national champions (through subsidies and access to government data) and enable corporations leading AI charge, it does. It is ambitious performance targets that incentivize China’s fifteen cities with populations of

⁶⁶ Graham Allison and Eric Schmidt, “Is China Beating the U.S. to AI Supremacy?” Paper, August, 2020.

⁶⁷ Graham Allison and Eric Schmidt, “Is China Beating the U.S. to AI Supremacy?” Paper, August, 2020.

more than 10 million and one hundred cities with populations of more than 1 million to compete in deploying sensors in highway systems (that will support driverless cars), cameras in the “sharp eyes” program that surveil public and private properties, and an array of similar collection technologies that create “smart cities.”⁶⁸

WHO HOLDS THE EDGE IN AI TALENT?

In the longer-term competition, China’s advantages begin with its population of 1.4 billion that creates an unparalleled pool of talent and data, the largest domestic market in the world, and universities that are graduating computer scientists in multiples of their American counterparts. China graduates four times as many bachelor’s students with STEM degrees and is on track to graduate twice as many STEM PhDs by 2025. By contrast, the number of domestic-born AI PhDs in the U.S. has not increased since 1990.⁶⁹

Even so, the United States enjoys two advantages in human capital that Beijing cannot replicate. First, half of the world’s AI superstars work for U.S. companies. Second, America can recruit from all the world’s 7.9 billion people, while inherent insularity restricts China to its own population.⁷⁰

HOW IS THE AI RACE LIKELY TO UNFOLD OVER THE NEXT DECADE?

To the extent that the next decade is an era of implementation, the advantage lies with China. As the National Security Commission on Artificial Intelligence assessed, “China possesses the might, talent, and ambition to surpass the United States as the world’s leader in AI in the next decade if current trends do not change.” However, if the most significant advances

⁶⁸ Graham Allison and Eric Schmidt, “Is China Beating the U.S. to AI Supremacy?” Paper, August, 2020.

⁶⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 7.

⁷⁰ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 8.

in AI in the next decade come from breakthrough leaps in algorithms and hardware, the advantage lies with the U.S.⁷¹

Key Technology 2: 5G

5G has become a flashpoint in the U.S.-China technology rivalry, as seen in the controversy over Huawei's role in building 5G networks in many markets around the world. Professor Allison highlights the importance of 5G as an enabling technology for many sectors in "The Great Tech Rivalry" report and pieces such as an op-ed published in the Wall Street Journal in February 2022 titled "China's 5G Soars Over America's."⁷² As Professor Allison points out in that article, the transition to real 5G will lead to analogous breakthroughs in autonomous vehicles, virtual-reality applications like the metaverse, and other areas that have yet to be invented. He also argues that there are many potential 5G applications that could confer an advantage on a country's capabilities in intelligence and military affairs, making 5G an important field of great power competition.

HOW DO THE U.S. AND CHINA CURRENTLY COMPARE IN THE ROLLOUT OF 5G INFRASTRUCTURE?

So basically, a short version of the story is that 3G was dominated by Europe; the US later rolled out 4G and created an environment in which then it was possible for people to invent things which we now think of as smartphones, social media, Google Maps, Uber, and lots of things that nobody could have been imagined before in the world of 3G.

So, 5G – 5G is heavily advertised in the U.S.—and you cannot watch the football playoff games or anything else without being inundated [with advertisements for 5G], as you know. But actually, this is not a real 5G service. The title of our article was, “America’s 5G deserves Five Fs.” We do a comparison with China. If you buy an Apple smartphone that’s 5G enabled, the only reason why that would be valuable to have in most of the U.S. would be if you were going to go to the Olympics, to Beijing,

⁷¹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 9.

⁷² Graham Allison and Eric Schmidt, “China’s 5G Soars over America’s.” *The Wall Street Journal*, February 16, 2022.

where you would be able to downstream at five times 4G speeds. Whereas here [in the US], 5G has the same speeds as 4G, sometimes even slower. So, this is a case where—no blame for China, good for China doing what it did and doing it successfully—blame the U.S. for not running faster and finding a way to do so. And so that’s the struggle.

Now, competition is, at least in economics, a good thing. Competition in Olympics and athletics is a good thing. I run faster if I’m running against somebody, a competitor, than I do when running alone. So how then to recognize the win-win component of constructive competition, and nonetheless, at the same time, recognize that at the end of the day, the party that wins the race, for example in 5G, will have advantages economically and in security terms, in their rivalry with the other competitor?⁷³

[N]early all key indicators support projections that China will dominate the 5G future. By the end of 2020, China had 150 million 5G users to America’s 6 million; 700,000 5G base stations to America’s 50,000; 460 MHz of licensed mid-band spectrum to America’s 70 MHz; and 300 Mbps in average 5G speeds to America’s 60 Mbps. Of the five major 5G equipment providers, two are Chinese; zero are American. Over the past two decades, China’s national champion Huawei has gone from 0% market share in telecommunications infrastructure to becoming the world’s leading supplier of 5G equipment, with 28% market share (while former American national champions Lucent and Motorola crashed from 25% in 2000 to 0% today).⁷⁴

WHY HAS THE U.S. FALLEN BEHIND IN 5G?

In the Article “China’s 5G Soars Over America’s” Professor Allison points out two important reasons why the U.S. has fallen behind in 5G.

The first is spectrum allocation. Professor Allison describes Washington’s relationship with the U.S. mobile industry as “dysfunctional,” as seen in the example of the Federal Aviation Administration’s hysteria over the proximity of American airports to 5G services, which operate near dozens of

⁷³ Graham Allison, “The Future of Great Power Relations: How Can the US and China Co-exist?” CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

⁷⁴ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 11.

airports around the world without a problem. By contrast, Beijing has prioritized expanding its 5G network and has moved quickly to give 5G service providers access to the most productive portion of the wireless spectrum, known as midband. Professor Allison points out that China has provided 5G providers with at least three times as much midband as the United States has. Both of AT&T and Verizon's 4G and 5G networks utilize the same frequency bands. Their 5G networks are therefore, in the words of one industry observer, "just 4G with sprinkles on it."

In the same article, Professor Allison points out that China has simply invested much more in 5G infrastructure. China has already invested \$50 billion in building its 5G network and is projected to invest another \$100 billion over the next five years on 5G. By comparison, the Innovation and Competition Act, a bill that Senate Majority Leader Chuck Schumer has described as "the key to preserving America's position on the world stage as a current and future technological leader in the twenty-first century," allocated just \$1.5 billion investment on 5G mobile networks through 2026.⁷⁵

ARE THERE ANY AREAS WHERE THE U.S. HOLDS THE EDGE IN 5G?

Despite China's head start in the build-out and application of 5G, Professor Allison points out that the U.S. does maintain an advantage in other aspects of 5G development, such as R&D, standards, and applications.

American 4G patents underpin the fundamental building blocks of 5G, and U.S. companies currently chair a plurality of committees at the industry standards body 3GPP [...] In 5G applications, America's advantages include its tech giants' centrality to the global tech ecosystem, leadership in 5G chip design, and dominance of key related technologies such as cloud infrastructure. But the brute fact is that without robust national 5G infrastructure and users living in 5G environments, the U.S.

⁷⁵ Graham Allison and Eric Schmidt, "China's 5G Soars over America's." *The Wall Street Journal*, February 16, 2022.

will be at a disadvantage in developing the next killer applications for 5G.⁷⁶

Key Technology 3: Semiconductors

As described in the “The Great Tech Rivalry,” semiconductors have become “the most important building block for our economic livelihood and every aspect of human life.”⁷⁷ Chip shortages during the pandemic have given us a small glimpse of how important these tiny but crucial components are for a broad range of industries and technologies, from AI and computers to automobiles. Given their importance as a general-purpose element of technology and innovation, chips have become a crucial aspect of U.S.-China tech competition.

LEADING CHIP FIRMS LIKE INTEL, NVIDIA, AND QUALCOMM ARE AMERICAN. DOESN'T THIS GIVE THE U.S. A DOMINANT LEAD IN SEMICONDUCTORS?

The U.S. retains its dominance of the semiconductor industry that it has had for almost half a century, but this position has been gradually eroded by domestic underinvestment and rising overseas competition. Although the U.S. still leads in chip design and semiconductor manufacturing inputs, its share of semiconductor fabrication has fallen from 37% in 1990 to 12% today.⁷⁸

⁷⁶ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 12.

⁷⁷ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 23.

⁷⁸ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 21.

WHAT PROGRESS HAS CHINA MADE IN SEMICONDUCTORS? CAN CHINA CATCH UP TO THE U.S. IN THIS FIELD?

The undeniable reality is that China's potential to become a semiconductor leader can no longer be discounted; and, on the current trajectory, it is more likely than not that President Xi will accomplish his goal of China becoming a top-tier player in the semiconductor industry by 2030.⁷⁹

Semiconductor Fabrication

China's production of semiconductors has surpassed America's, with its share of global production rising to 15% from less than 1% in 1990, while the U.S. share has fallen from 37 to 12%.⁸⁰

From 1990 to 2020, China built 32 semiconductor megafactories, compared with 24 megafactories in the rest of the world. None were built in the U.S.⁸¹

China's national champion in semiconductor fabrication, Semiconductor Manufacturing International Corporation (SMIC), has consistently ranked among the top five foundries over the past decade, and its breakthrough N +1 7-nanometer process last year means that its advanced fabrication capabilities now rival Intel's.⁸²

Chip Design

In the chip design arena, Huawei's HiSilicon subsidiary has grown into an integrated circuit design powerhouse. In 2020, it became the first Chinese company to break into the top ten semiconductor companies and replaced long-time market leader Qualcomm as China's top smartphone processor

⁷⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.," Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 25.

⁸⁰ Graham Allison and Eric Schmidt. "China Will Soon Lead the U.S. in Tech." *The Wall Street Journal*, December 7, 2021.

⁸¹ Graham Allison and Eric Schmidt. "Semiconductor Dependency Imperils American Security." *The Wall Street Journal*, June 20, 2022.

⁸² Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.," Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 22.

supplier, though export controls have damaged the company's near-term prospects. While China is still dependent on semiconductor imports to meet 85% of domestic demand, these recent achievements disprove the decades-long conventional wisdom that China's semiconductor industry cannot catch up.⁸³

WHAT IS THE IMPACT OF POLICIES TO CUT OFF CHINA'S ACCESS TO SEMICONDUCTORS?

Though recent U.S. actions like sanctions on Huawei and SMIC's inclusion on the Entity List have slowed China's progress, completely cutting off China's access to advanced semiconductors would be a self-sabotaging policy, since the Chinese market accounts for 36% of all U.S. chip sales.⁸⁴

CAN CHINA CATCH UP OR EVEN TAKE THE LEAD IN THE FIELD OF SEMICONDUCTORS?

The Semiconductor Industry Association projects that over the next decade, China will develop 40% of new global capacity and become the world's largest semiconductor manufacturer, with 24% market share.⁸⁵

Over the next decade, China will become the world's largest semiconductor producer in mature technology nodes, while ASML CEO Peter Wennink estimates that "in 15 years' time they'll be able to do it all by themselves [and achieve technological sovereignty in semiconductors]."⁸⁶

⁸³ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 22.

⁸⁴ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 24.

⁸⁵ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 22.

⁸⁶ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 21.

WHAT WILL BE THE IMPACT OF THE 2022 CHIPS ACT WHICH WILL ALLOCATE OVER \$50 BILLION TO SUBSIDIZE U.S. CHIPMAKERS?

If Congress enacts the bill, U.S. investment would still be only a third of what the Chinese government will spend. From 1990 to 2020, China built 32 semiconductor megafactories, compared with 24 megafactories in the rest of the world. None were built in the U.S. [...] Even with ideal policies, it is unlikely that U.S. companies can overtake [Taiwanese chipmaker] TSMC's leadership in advanced chips.⁸⁷

Key Technology 4: Green Energy

The looming climate crisis and war in Ukraine have reaffirmed the central role of energy in the global economy and geopolitics. In the twenty-first century, the shift to green energy is likely to have an impact just as significant as oil in the twentieth century, with broad ranging ramifications across many sectors and geographies.

Given the importance of green energy and the huge economic opportunities, this field is emerging as an important field in global competition, including between the U.S. and China. However, given that the challenge of reducing carbon emissions and shifting to green energy is too large for any single country to handle alone, it is also an area where the great powers must work together if the world is to avoid climate catastrophe.

WHAT ARE THE RELATIVE STRENGTHS OF THE U.S. AND CHINA IN THE FIELD OF GREEN ENERGY?

In the race to harness green energy, the U.S. has been the primary inventor of new technologies over the past two decades, but China has taken the lead in manufacturing and deploying those technologies, allowing it to dominate multiple links of the green energy supply chain. Indeed, as energy geopolitics expert Daniel Yergin stated, "In green

⁸⁷ Graham Allison and Eric Schmidt, "Semiconductor Dependency Imperils American Security." *The Wall Street Journal*, June 20, 2022.

energy, China has already reached the ‘Made in China 2025’ goal of a dominant role in this century’s new industries.”⁸⁸

WHICH AREAS OF THE GREEN TECH SUPPLY CHAIN DOES CHINA HOLD THE ADVANTAGE?

On Equipment

China is now the dominant manufacturer of equipment for generating renewable energy. From producing less than 1% of solar panels in 2000, China now supplies 70% of solar panels globally. By comparison, in a stunning reversal, America’s share fell from 30% in 2000 to less than 1% today. Four of the world’s top ten wind turbine producers are Chinese and control 40% of the global market, versus 12% for the U.S. These advantages in manufacturing have positioned China as the largest producer of solar and wind energy, with more than three times the capacity of the United States in solar and two times in wind.⁸⁹

On Raw Materials

China has a near-monopoly over several of the key inputs necessary for solar panels, batteries, and other green tech, including chemical lithium (50% of global production), polysilicon (60%), rare earth metals (70%), natural graphite (70%), cobalt refining (80%), and rare earths refining (90%). And where China lacks resources domestically, it has secured them overseas. Chinese companies own 8 of the 14 largest cobalt mines in the Democratic Republic of the Congo (accounting for 30% of global output) and a 51% stake in the world’s largest lithium reserve (which, combined with other assets, makes China the largest producer of hard-rock lithium at over 50% of global production). Meanwhile, the U.S. imports 40% of its lithium, 80% of its cobalt, and 100% of its graphite. It could take

⁸⁸ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 30.

⁸⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 31.

20–30 years just for the U.S. to catch up with China in sourcing raw materials.⁹⁰

On Energy Storage

In energy storage, Bloomberg’s New Energy Outlook estimates that China controls 80% of battery raw material refining, 77% of cell capacity, and 60% of battery component manufacturing. Its assessment states that “Chinese manufacturers, like CATL, have come from nothing to being world-leading in less than 10 years,” while the “U.S. languishes in sixth place in 2020.”⁹¹

On Electric Vehicles (EVs)

China has already become both the top producer of and market for EVs, with 1.3 million EVs sold in 2020 (more than 40% of global sales) versus 300,000 in the U.S. This rapid growth has increased China’s share of EVs from 20% of America’s in 2013 to 200% today. By 2028, China will be making nearly six EVs for each one the U.S. makes. China’s EV charging stations exceed one million nationwide and were being installed at a rate of a thousand a day in 2019, while the U.S. has only installed 100,000 total. Chinese firm BYD dominates 90% of the electric bus market, supplying buses to cities like Los Angeles and New York. Recognizing that China is on track to dominate the future of EVs, President Biden has declared, “We ought to be the single most significant suppliers of electric buses and vehicles in the world before it’s over. Right now, we’re running way behind China.”⁹²

⁹⁰ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 32.

⁹¹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 32.

⁹² Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 33.

WHAT ARE AMERICA'S ADVANTAGES WHEN IT COMES TO GREEN TECH?

America's edge lies in breakthrough innovations. While China's advantages in process engineering have allowed it to lead in scaling and deploying green tech, as former Secretary of Energy Ernest Moniz states, "the U.S. has shown over many decades an unparalleled capacity to nurture energy innovation." In carbon capture and sequestration (CCS) technology, the U.S. is home to more than half of the world's large-scale CCS facilities and produces the most CCS publications. Last December, QuantumScape, an American startup, showcased lithium-metal batteries which are safer, longer-lasting, and can increase electric vehicles' range by more than 80%, an achievement which the MIT Technology Review recognized as one of the top 10 technologies of 2021 alongside mRNA vaccines and GPT-3. And while China is now its biggest market, Tesla is undeniably a product of America's innovation ecosystem and one of the top successes of the U.S. government's Advanced Research Projects Agency-Energy.⁹³

"Ingredients for Innovation": Success Factors in the Us-China Tech Competition

Perhaps more important than leading in any one sector or field of technology, what really matters for the long-term technological strength and national success in innovation is have the right ingredients and environment that allows individuals, institutions, and companies to innovate in any of these given fields, or indeed new ones that may emerge in future. Among the most important of these "ingredients for innovation" are talent, having a supportive R&D ecosystem, and effective policies to support science and technology.

⁹³ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, pp. 33–34.

HOW DO THE TWO COUNTRIES COMPARE IN TERMS OF THE PIPELINE FOR TALENT?

In international science and technology rankings for K-12 students, China consistently outscores the United States in math and science—in 2018, China’s PISA scores, which assesses math, science, and reading, were ranked number one while the U.S. ranked 25th.⁹⁴

By total number of undergraduate university degrees in science and engineering, America was the global leader in 2000 with over 500,000 while China stood at just under 360,000. Today, China graduates four times as many STEM students as the United States (1.3 million vs. 300,000) and three times as many computer scientists (185,000 vs. 65,000).

China has a significant edge in its education pipeline, producing four times more bachelor’s students and two times more graduate and Ph.D. students in STEM (science, technology, engineering, and mathematics) than the United States each year.⁹⁵

DOESN’T CHINA’S HUGE POPULATION OF 1.4 BILLION GIVE IT THE UPPER HAND WHEN IT COMES TO TALENT?

With a population four times larger than the United States’, China has a much bigger pool of home-grown talent. But in a world where English has become the international language and as a country that takes pride in being a nation of immigrants, the United States has the great advantage of being able to attract the world’s most talented technical minds.⁹⁶

China struggles to attract tech superstars from around the world. The total number of naturalized Chinese citizens remains under 2,000. In contrast, America has naturalized almost 15 million citizens in the past two decades [...] Immigrants have fueled U.S. leadership in technology, from the co-founders of American tech giants, including Google and

⁹⁴ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 35.

⁹⁵ Graham Allison and Eric Schmidt, “The U.S. Needs a Million Talents Program to Retain Technology Leadership.” *Foreign Policy*, July 16, 2022.

⁹⁶ Graham Allison and Eric Schmidt, “The U.S. Needs a Million Talents Program to Retain Technology Leadership.” *Foreign Policy*, July 16, 2022.

Intel, to the founders and chief executives of the firms that brought us vaccines against COVID-19, Pfizer and Moderna. Of all the billion-dollar startups in the U.S. in the past 20 years, how many have been founded or cofounded by individuals born abroad or their children? More than half. As the society that attracts the most talented inventors and entrepreneurs in the world and gives them the freedom and opportunity to realize their dreams, the U.S. remains unrivaled.⁹⁷

IS THE U.S. SET TO MAINTAIN ITS PLACE AS A MAGNET FOR GLOBAL TALENT?

[A]lthough America has historically benefited from its ability to attract talent from a global pool of 7.9 billion (with almost half of all U.S. Fortune 500 companies founded by immigrants or their children), as the National Security Commission on Artificial Intelligence recognized, “Competition for international students has accelerated...For the first time in our lifetime, the United States risks losing the competition for talent on the scientific frontiers.”⁹⁸

HOW DO THE U.S. AND CHINA COMPARE IN TERMS OF R&D SPENDING?

At the beginning of the century, America was number one in R&D expenditures, spending \$270 billion in current purchasing power parity, followed by the E.U. at \$180 billion. That same year China’s expenditure was only 12% of America’s at \$33 billion. But by 2020, China rose to number two with 90% of America’s expenditure. On its current trajectory, China will overtake the U.S. within the next decade.⁹⁹

⁹⁷ Graham Allison, Nathalie Kiersznowski and Charlotte Fitzek, “The Great Economic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, March 23, 2022, p. 35.

⁹⁸ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 36.

⁹⁹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, “The Great Tech Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 36.

Although the U.S. maintains a strong position in long-term drivers of scientific development (where the U.S. accounts for 60% of global spending on basic research to China's 20%), China has focused intensely on turning scientific developments into commercial products and now spends almost \$70 billion more annually than the U.S. in experimental development.¹⁰⁰

WHICH COUNTRY LEADS IN TERMS OF PATENTS, PUBLICATIONS, AND INNOVATIVE COMPANIES?

In international patent filings, China displaced the U.S. as the top user of the Patent Cooperation Treaty (PCT) in 2019, when it filed 22% of PCT patents, compared to 0.6% in 2000. Meanwhile, the U.S. share fell from 42 to 22% during the same period. And in 2016, China overtook the U.S. as the top producer of scientific publications, now accounting for over 20% of science research output worldwide.¹⁰¹

While six American companies top the list of the world's 10 most valuable tech companies, six Chinese companies lead the list of the 10 most valuable unicorns pioneering new technologies.¹⁰²

ON MILITARY COMPETITION

Unlike US-China competition over the economy and technology, which contain some elements of cooperation and benefit as well as competition, in the military arena, the competition is largely zero-sum.

Of course, nobody wants to imagine a war or any form of military conflict between the U.S. and China. Indeed, preventing such a confrontation is the motivating rationale for much of Professor Allison's research and writing on the U.S.-China relationship, and the core aim of this book. However, just

¹⁰⁰ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 36.

¹⁰¹ Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 37.

¹⁰² Graham Allison, Kevin Klyman, Karina Barbesino and Hugo Yen, "The Great Tech Rivalry: China vs the U.S.." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 7, 2021, p. 36.

as it is important to understand the evolving competition between the U.S. and China in the arenas of economics, finance, and technology, it is also important to understand the bilateral rivalry in military strength so that this competition can be managed, and hopefully ensure that the capabilities described and analyzed below are never used in anger.

As Professor Allison points out, the most salient point about the military balance between the U.S. and China is that both are equipped with robust second-strike nuclear arsenals, meaning that any attack by one on the other could lead to mutually-assured destruction.

Even so, below this threshold of nuclear annihilation, the economic trajectories of both countries will impact defense budgets and the development and deployment of new weapons and other systems that affect the balance of military power between the two countries.

Professor Allison's team have conducted in-depth research to map the evolving military strengths of the U.S. and China across various different fields, and in December 2021, Professor Allison's presented their findings and key conclusions in a report titled "The Great Military Rivalry: China vs the U.S." Two findings from this report stand out. The first is that the era of U.S. military primacy is over. The second is that, while the U.S. remains unique in its position as a military superpower, given its unrivalled power projection capabilities and alliance system, in China and Russia, it now faces "serious military rivals" that can match the U.S. as peers in particular domains. The rest of this section delves deeper into these findings, drawing on the report and other articles that Professor Allison has written on the topic of military affairs.

DOESN'T THE U.S. SPEND MUCH MORE ON DEFENSE THAN CHINA?

While the U.S. still spends more on defense, Professor Allison points out that the picture is more complicated than suggested and not as simple as raw numbers often given for defense budgets. First, it is important to remember that U.S. defense spending is spread over a wider geographical area than China's:

The U.S. defense budget pays for bases and forces to meet global commitments in Europe, the Middle East, South America, and Asia. The U.S. currently maintains 750 overseas bases around the world. Thus, while the U.S. Indo-Pacific Command's "area of responsibility" includes

half the world's population and two of its three largest economies, its commander must compete for funding with other commanders responsible for the United States' many other commitments. China's defense budget, by contrast, is focused on Northeast Asia.¹⁰³

We should also consider differences in how defense spending is measured and what items are included:

Measured by the traditional yardstick, market exchange rate (MER), in 1996, China's reported defense budget was 1/30 the size of America's. By 2020, it was 1/4. When spending that appears in other budgets—for example, on military research and development—is included, its actual defense budget is 1/3 America's. And if measured by the best yardstick of economic and military potential (purchasing power parity), Beijing's defense budget is over 2 times its stated budget—which brings it to over half America's and on a path to parity.

In 2020, the U.S. defense budget was \$738 billion, while China's reported budget was \$178 billion at the prevailing market exchange rate. But when items that China excludes from its official reports that appear in the U.S. defense budget, including research and development (on which the U.S. spends over \$100 billion), veterans' retirement payments, and construction expenses, are included, as SIPRI found, since 1996, the gap in spending narrowed from 19:1 to 3:1.¹⁰⁴

HOW DOES THE COMPARISON OF DEFENSE SPENDING CHANGE IF MEASURED IN TERMS OF PPP?

Just as many experts argue that PPP is a more useful than MER as a measure for comparing economic strength, Professor Allison points out that the same applies when comparing defense spending:

[I]n comparing defense budgets, it is essential to consider not just how much each pays for items but what each gets at the prices they pay.

¹⁰³ Graham Allison and Jonah Glick-Unterman, "The Great Military Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, p. 26.

¹⁰⁴ Graham Allison and Jonah Glick-Unterman, "The Great Military Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, p. 23.

Both the CIA and the IMF have concluded that the best single metric for comparing national expenditures is Purchasing Power Parity (PPP).

When the PLA buys bases or ships or DF-21 missiles, it pays for them in RMB and at prices substantially below the cost of equivalent products in the U.S.

The most vexing issue in comparing defense spending is personnel costs [...] The average PLA active duty soldier costs China 1/4 what the U.S. pays. The Department of Defense currently spends on average over \$100,000 per active duty service member annually, including salary, benefits, and contributions to retirement programs. In contrast, the PLA's budget for each of its 2.035 million active duty personnel is on average \$28,000.

In sum, measured by PPP, in 2020, Chinese defense spending stood at nearly 53% of U.S. spending, and on a path to parity in the foreseeable future.¹⁰⁵

HOW MIGHT FRONTIER TECHNOLOGIES LIKE AI AND QUANTUM COMPUTING PLAY INTO THE BALANCE OF MILITARY POWER?

AI functions as a force multiplier by improving vision and targeting, mitigating manpower issues, hardening cyber defenses, and accelerating decision-making. Its advantages were plain to see in the Defense Advanced Research Projects Agency's August 2020 AlphaDogfight Trials, when an AI algorithm swept a human F-16 pilot 5 to 0. [...] China is ahead in some sectors of quantum technology, a game-changing asset that could guarantee secure communications, expose stealth aircraft, complicate submarine navigation, and disrupt battlefield communications.¹⁰⁶

¹⁰⁵ Graham Allison and Jonah Glick-Unterman, "The Great Military Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, pp. 23–25.

¹⁰⁶ Graham Allison and Jonah Glick-Unterman, "The Great Military Rivalry: China vs the U.S." Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, p. 18.

WHAT DO CHINA'S ADVANCES IN SPACE EXPLORATION AND TECHNOLOGY MEAN FOR ITS MILITARY CAPABILITIES?

Beijing operates over 120 intelligence, surveillance, and reconnaissance and remote sensing satellites—second only to the U.S.—while expanding its BeiDou precision, navigation, and timing system as an alternative to GPS. In 2019, the BeiDou constellation surpassed GPS in size and visibility. In April 2021, China launched the core module of its first long-term space station, achieving in 20 years what took the U.S. 40. As the U.S.-China Economic and Security Review Commission concluded, “China’s single-minded focus and national-level commitment to establishing itself as a global space leader... threatens to undermine many of the advantages the United States has worked so long to establish.”¹⁰⁷

ON DIPLOMATIC COMPETITION

In August 2022, Professor Allison and his team published “The Great Diplomatic Rivalry: China vs the U.S.”—one of five chapters of the Great Rivalry Report. In this report, the authors provide an assessment of the U.S. and China’s statecraft and diplomacy, which they see as a critical component of the competition between these two countries that will continue to intensify in the coming years. It compares their performance in various aspects of their diplomacy (prior to Russia’s invasion of Ukraine in 2022 and the widespread sanctions and diplomatic activity that followed). Like the other chapters of this report, it also puts forward criteria and indicators to assess the strengths of the two sides and offers a judgement about the relative “state of the race” in diplomacy.

In summing up the state of the diplomatic competition between China and the U.S., Professor Allison says that it is now “game on” as China has become more determined to “compete as aggressively in bilateral and multilateral diplomacy as it does in other arenas.” Allison describes how diplomacy has become a “lost art” for Washington, quoting Director of the CIA Bill Burns in his review of what has happened over the past three decades. However, while recognizing that diplomacy is an art that the U.S.

¹⁰⁷ Graham Allison and Jonah Glick-Unterman, “The Great Military Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, December 16, 2021, p. 20.

has “lost,” Burns’ assessment is that “China has not yet found it.” The extracts from this report below provide a snapshot on of some key metrics and assessments that Allison uses to compare the U.S. and China in terms of diplomatic strength and performance.

HOW DO YOU DEFINE DIPLOMACY?

According to the definition we have found most useable, diplomacy is “the established method of influencing the decisions and behavior of foreign governments and peoples through dialogue, negotiation, and other measures short of war or violence.” As such, it is a complex art combining relationships, advocacy, inducements, threats, coercion, and words to advance a nation’s agenda without the use of guns and bullets.¹⁰⁸

WHAT ARE THE KEY COMPONENTS OF DIPLOMACY?

Conceptually, diplomacy includes three marbled layers that can be described as statecraft, architecture, and gardening. Statecraft consists of the fundamental choices a nation makes about its role in the world and the path it chooses to meet major challenges to its survival and well-being. [...] If a state chooses unachievable objectives, even the best architecture and gardening will be doomed to fail. Building on the foundation of a state’s grand strategy, at a second level, architecture consists of the design and construction of regimes, norms, institutions, and processes to achieve the state’s goals. [...] The third level of diplomacy is the day-to-day work that the American statesman George Shultz called “gardening”: weeding and seeding, watering and feeding relationships to influence the choices and actions of target states.¹⁰⁹

¹⁰⁸ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 9.

¹⁰⁹ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, pp. 9–10.

HOW DO THE DIPLOMATIC NETWORKS OF THE U.S. AND CHINA COMPARE TODAY?

In 2019, China overtook the U.S. with the largest diplomatic network in the world.

It now has 276 embassies, consulates, and other posts—just ahead of the U.S.’s 273. Of the United States’ embassies and consulates with ambassadorial posts, over a year into the Biden administration, more than a third—69—were without ambassadors. This was in large part due to individual senators’ decisions to place nominees on “hold”—including the U.S. Ambassador to Beijing, who was finally confirmed after waiting nine months for a vote in the Senate. By contrast, zero of China’s embassies lack ambassadors.¹¹⁰

HOW DO THE TWO COUNTRIES COMPARE IN TERMS OF VISITS BY HIGH-LEVEL OFFICIALS?

From 1993 to 2000, Jiang Zemin travelled to call on about half the leaders of other countries as President Clinton did: 67 to 133. But from 2013 to 2020, Xi made roughly the same number of international visits as Obama and Trump combined: 98 to 103. On the other hand, American Secretaries of State continued to rack up many more frequent flier miles than their Chinese counterparts: between 2013 and 2019 traveling to see others 501 times, compared to China’s 254.¹¹¹

HOW IS THE BALANCE CHANGING IN TERMS OF THE PRESENCE AND ACTIONS OF CHINA AND THE U.S. IN INTERNATIONAL ORGANIZATIONS?

In the past two decades, the number of Chinese working in international organizations has increased dramatically, and within these organizations its diplomats have worked their way up to positions of leadership. In

¹¹⁰ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 20.

¹¹¹ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 21.

2000, Chinese officials headed no UN specialized agency; in 2020, they led four out of 15, while the U.S. led just one. As U.S. contributions to international institutions have declined, China has stepped in to become the largest contributor of peacekeeping personnel among the permanent members of the UN Security Council in 2019 (the U.S. was last). From its position as the 16th largest contributor to the UN regular budget in 2000, China has surpassed Japan to become the second largest contributor today—behind only the United States.¹¹²

HOW DO YOU ASSESS THE CHANGES IN THE BALANCE OF DIPLOMATIC STRENGTH BETWEEN THE U.S. AND CHINA?

On most metrics of diplomacy, China's position relative to that of the U.S. has risen dramatically over the past two decades. In hosting summits, one-on-one meetings with heads of state, face-to-face meetings of key cabinet officers in China and other nations' capitols, numbers of embassies and consulates, numbers of diplomats serving internationally, representation in international organizations, foreign affairs spending, diplomatic training, and positions of leadership in international organizations, China has made great leaps forward.¹¹³

WHAT ARE THE CURRENT TRENDS REGARDING PERCEPTIONS OF THE TWO COUNTRIES ON OTHER DEVELOPED COUNTRIES?

A 14-country Pew Research survey showed that between 2018 and 2020, unfavorable opinion of China “soared” to new heights. Indeed, a “majority” in every one of the surveyed countries had an “unfavorable opinion” of China. This includes 81% of the population in Australia, 74% in the UK, 85% in Sweden, 73% in Canada, and 86% in Japan. In 2020 alone,

¹¹² Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, pp. 15–16.

¹¹³ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 8.

these numbers reflected an uptick in negative views by 24% in Australia, 19% in the UK, and 15% in Sweden. By contrast, for the United States, the Pew Research Center's poll in 2021 showed that the change in administration led to a steep rise in favorability ratings, with a jump from 34 to 62% of respondents who viewed the U.S. positively since Biden took office.¹¹⁴

HOW DO THE U.S. AND CHINA COMPARE IN TERMS OF SOFT POWER?

According to Professor Joseph Nye, soft power refers to “the use of positive attraction and persuasion to achieve foreign policy objectives,” primarily by getting other nations to “want what you want.” The comprehensive “Soft Power 30” report analyzes polling data from 30 nations across five continents. It measures soft power in terms of a nation’s “cultural appeal,” the reputation of its higher education system, attractiveness of its economic model, and its level of digital engagement with the world. In the most recent edition of this report in 2019, the United States’ score of 77.8 led China’s 51.85 by over twenty points. The U.S. was among the top five of the nations included in the report, while China rounded out the bottom five.¹¹⁵

ON THE FUTURE OF THE INTERNATIONAL ORDER

This chapter has outlined Professor Allison’s analysis of the “tectonic shifts” that have reshaped the US-China relationship—the structural shifts that have occurred in the balance of power across the economic, technological, military, and diplomatic realms. The final section of this chapter explores Professor Allison’s views on the implications of these tectonic shifts for the international order and the roles of the US and China within it, including what comes next after the unipolar era, the return of “spheres of influence,”

¹¹⁴ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 22.

¹¹⁵ Graham Allison, Alyssa Resar and Karina Barbesino, “The Great Diplomatic Rivalry: China vs the U.S.” Paper, Belfer Center for Science and International Affairs, Harvard Kennedy School, August 2022, p. 25.

the future of globalization, and why the U.S. and China are “condemned to co-exist.”

IF UNIPOLARITY IS OVER, WHAT REPLACES IT? WHAT DOES THIS MEAN FOR AMERICA’S ROLE IN THE WORLD?

More slowly and more painfully, [U.S. policymakers] are discovering that the United States’ share of global power has shrunk. When measured by the yardstick of purchasing power parity, the U.S. economy, which accounted for half of the world’s GDP after World War II, had fallen to less than a quarter of global GDP by the end of the Cold War and stands at just one-seventh today. For a nation whose core strategy has been to overwhelm challenges with resources, this decline calls into question the terms of U.S. leadership.¹¹⁶

Unipolarity is over, and with it the illusion that other nations would simply take their assigned place in a U.S.-led international order. For the United States, that will require accepting the reality that there are spheres of influence in the world today—and that not all of them are American spheres.¹¹⁷

WHAT IS MEANT BY “SPHERES OF INFLUENCE”?

Where the equilibrium of forces between one state and another shifts to the point where the first becomes predominant, the resulting new balance of power casts a shadow that becomes, in effect, a “sphere of influence.” That specific term entered the vocabulary of diplomacy in the early nineteenth century, but the concept is as old as international relations itself. (As Thucydides noted, after the defeat of the Persians in the fifth century BC, Sparta demanded that Athens not rebuild the walls around its city-state to leave itself vulnerable.) Traditionally, great powers have demanded a degree of deference from lesser powers on their borders and in adjacent seas, and they have expected other great powers to respect that fact.

¹¹⁶ Graham Allison, “The Myth of the Liberal Order.” *Foreign Affairs*, July/August 2018.

¹¹⁷ Graham Allison, “The New Spheres of Influence.” *Foreign Affairs*, March/April 2020.

Recent actions by China and Russia in their respective neighborhoods are just the most recent examples of that tradition.¹¹⁸

HOW HAVE SPHERES OF INFLUENCE CHANGED IN THE TWENTY-FIRST CENTURY?

Spheres of influence also extend beyond geography. When the United States led the world in the creation of the Internet, and the hardware and software that empowered it, the United States enjoyed what Michael Hayden, a former director of the National Security Agency, later called a “golden age of electronic surveillance.” Since most countries were unaware of the surveillance capabilities revealed by the former NSA contractor Edward Snowden, the United States had an unparalleled ability to exploit technology to listen to, track, and even influence them. But post-Snowden, many states are resisting the current U.S. campaign to prevent them from buying their 5G wireless infrastructure from the Chinese telecommunications giant Huawei. As the leader of a country currently considering the choice recently put it, Washington is trying to persuade other countries not to buy Chinese hardware because it will make it easier for China to spy and instead to buy American hardware, which would make it easier for the United States to spy.¹¹⁹

WHAT IS THE FUTURE OF GLOBALIZATION IN OUR NEW MULTIPOLAR WORLD?

[T]hough it continues to attract critics, globalization will remain a formidable force reshaping nation-based international relations as we know it. In almost every dimension, American-led globalization, built upon a foundation of an American-led order, has made possible constructive competition that has produced huge benefits. From the advancement of knowledge in science and medicine, to technology and products and ideas, human experiences, personal relationships, food, and indeed life, a framework that has allowed more individuals from more countries to add

¹¹⁸ Graham Allison, “The New Spheres of Influence.” *Foreign Affairs*, March/April 2020.

¹¹⁹ Graham Allison, “The New Spheres of Influence.” *Foreign Affairs*, March/April 2020.

value has brought benefits beyond imagination. At the same time, policy makers will have to balance the gains of globalization with the reality that global competition disrupts normal conditions and life in all countries. Wonderful new technologies are also two-edged swords—as we saw when on 9/11 terrorists commandeered airplanes, converted them into guided missiles, and toppled the World Trade Center. Globalization has asymmetric consequences for states, each of whom can apply gains to strengthen its military and intelligence arsenal. Moreover, in empowering the “rise of the rest,” globalization poses particular challenges for a nation that has become accustomed to an unchallenged position of supremacy for decades.¹²⁰

DESPITE THEIR INTENSE RIVALRY, WHY ARE THE U.S. AND CHINA “CONDEMNED TO CO-EXIST”?

The objective conditions of the twenty-first century have condemned the U.S. and China to co-exist, since the only other option is to “co-destruct.” There are two arenas here. First, nuclear weapons. In the Cold War, we learned very painfully when the Soviet Union acquired a robust nuclear arsenal that was capable of a second strike, that we lived in a “MAD” world of Mutually Assured Destruction. That means that if one [power] attacked the other, at the end of the story, both would be destroyed. So, this is like a mutual suicide pact. I have compared it to inseparable conjoined twins in which, if one gives way to its impulses in dealing with the other and strangles it, it will succeed in killing its twin, but it will also commit suicide. So that’s the nuclear arena, and it’s true in the U.S.-China relationship today. Even though the U.S. has a much larger nuclear arsenal, it’s still the case that if there was a full-scale nuclear war, at the end of the war, America would be destroyed. So that’s mutually assured destruction.

In the twenty-first century, we also have the climate issue. China, the number one greenhouse gas emitter, and the U.S., which is the number two emitter, inhabit the same contained biosphere. Either nation can, by themselves, create an environment in which neither can live. So, we have a kind of a “climate MAD” analog to the nuclear situation.

¹²⁰ <https://www.globaltimes.cn/page/202012/1209820.shtml>.

In addition, [the U.S. and China] are both so entangled in the process of globalization and the global economy that neither can “decouple” itself from the other without impoverishing itself. So, on the one hand, [the U.S. and China] are going to be fierce rivals. On the other hand, we’re condemned by nature and by technology to cooperate in order to survive.¹²¹

In his 2019 article “Could the United States and China Be Rivalry Partners?” Professor Allison also highlights other areas in which neither state can ensure its most vital interest in survival without serious cooperation from the other:

Pathogens like Ebola or swine flu do not respect national borders. Thus, cooperation to prevent the spread of germs on a globe in which, as JFK put it, “we all breathe the same air,” is necessary for each to protect its own citizens.¹²²

[F]inancial crises, like the events of 2008 that occurred after the collapse of Lehman Brothers producing a Great Recession and threatening a second Great Depression, can only be managed if the two largest economies in the world work together. In 2008, they did. As former Secretary of the Treasury Hank Paulson—the key player for the United States in that event—has said, the Chinese cooperation in coordinating a Chinese fiscal stimulus was at least as important, and perhaps more important, than American action in what could have become a global depression. (And those who have forgotten the political consequences of the Great Depression of the 1920s should google fascism and Nazism.)¹²³

¹²¹ Graham Allison, “Thucydides’s Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

¹²² Graham Allison, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.

¹²³ Allison, Graham, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.



Are China and the U.S. Really “Destined for War”?

Fortunately, the American and Chinese governments know that a hot war would be a disaster for both. No serious person in either government wants war. Unfortunately, history offers many examples in which rivals whose leaders did not want war nonetheless found themselves forced to make fateful choices between accepting what they judged an unacceptable loss, on the one hand, and taking a step that increased the risks of war on the other.

—Graham Allison¹

War is the province of chance. In no sphere of human activity is such a margin to be left for this intruder, because none is so much in constant contact with him on all sides. He increases the uncertainty of every circumstance, and deranges the course of events.

—Carl von Clausewitz²

The previous chapter outlined Professor Allison’s assessment of the structural shift in U.S.-China relations that has set the scene for Thucydides’s Trap—that is, the growing strength of a rising power (China) relative to a ruling power (the U.S.) across various domains such as economics, technology, and military affairs.

¹ <https://nationalinterest.org/feature/taiwan-thucydides-and-us-china-war-204060>.

² C. Von Clausewitz, *On War* (J. J. Graham, Trans.). Wordsworth Editions, 1997.

However, a structural powershift alone does not cause war or make it inevitable. National leaders and policymakers still have agency within the structural conditions they find themselves. They make decisions that make war more or less likely, including the ultimate decision to open military hostilities against an opponent.

This raises the question—even given of the structural conditions that underly Thucydides’s Trap, could a war between the U.S. and China really occur in the twenty-first century, especially a war that neither side wants?

In Destined for War Professor Allison forcefully argues that the answer is “yes.” He highlights numerous examples from history when great powers have stumbled into a war that no side really wanted. He shows how, in the dangerous Thucydidean dynamic, misperceptions are magnified, miscalculations multiplied, and risks of escalation amplified. He demonstrates how extraneous events that would otherwise be manageable can compel one or the other to react, triggering a vicious cycle of reactions that can drag them into a war of nobody’s choosing.

To shed light on whether that could happen between the U.S. and China, this chapter presents Professor Allison’s views on where the bilateral rivalry stands today, factors that could affect the chances of war—such as personalities, ambitions and intentions, and cultural and political factors—and the potential sparks or sequences of events that could see the U.S. and China come into military conflict.

IF WE LOOK AT THE U.S.-CHINA RELATIONSHIP TODAY, HOW DOES IT COMPARE TO THE MODEL OF THUCYDIDES’S TRAP THAT PREDICTS CONFLICT BETWEEN A RISING AND INCUMBENT POWER?

Where does this rivalry stand today? Right on track. If Thucydides were watching he would say this looks like the grandest rising power I ever saw, accelerating towards the most colossal ruling power I ever saw. Well, we’ve got an unstoppable force and an immovable object. I’m looking forward to seeing the grandest collision of all times. I think that’s what he would say. The strategic rationale, in particular, that gave a picture of what would be U.S.-China relations would be, has collapsed both in Washington and in Beijing.³

³ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

COULD CHINA AND THE U.S. BE SLEEPWALKING TOWARD WAR AND STUMBLING DOWN THE PATH GERMANY AND THE UNITED KINGDOM TOOK AT THE BEGINNING OF THE LAST CENTURY?

The possibility will strike many readers as inconceivable. But we should remember that when we say something is “inconceivable,” this is a claim not about what is possible in the world, but rather about what our limited minds can imagine.

My answer to the question of whether we are sleepwalking toward war is “yes.” The following is a summary of my argument in four “tweets”: First, the risks of war in the decade ahead are eerily similar to those faced by Germany and the UK a century ago. Second, the primary driver in what became World War I and what could become World War III was clearly identified by Thucydides 2,500 years ago in his analysis of the great war between Athens and Sparta. Third, preventing war in this case will require strategic imagination far beyond anything seen in Washington or Beijing to date. And fourth, the potentially most helpful but missing actor in this picture is Europe.⁴

IS WAR BETWEEN CHINA AND THE U.S. INEVITABLE?

No, let me say this three times quickly. No, not inevitable, no, not inevitable. My book [*Destined for War*] is not saying war is inevitable.

The purpose of the book is to prevent a war, not to predict a war, not to suggest a war would be a good idea. A war would be a crazy idea, would be a catastrophic idea. And if war occurs, statesmen will not be able to blame some iron law of history. It'll be for failures to take actions that they could have taken that would have prevented a war. The purpose of this book is to try to motivate thinking Chinese and thinking Americans and thinking people in other parts of the world. What can we do to prevent a sequence of events that could end in a war. That would be catastrophic for everyone.⁵

⁴ Graham Allison, “Beyond Trade: The Confrontation Between the U.S. and China.” *The Security Times*, February 2020.

⁵ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

WHAT FACTORS CAN DRIVE A THUCYDIDEAN DYNAMIC THAT LEADS TO WAR?

It's complicated, and each case is different, but there are basically three layers to the story.

First layer is the material, what Marx would call the objective conditions. The second layer is perceptions, emotions, and psychology, what Marx would call subjective. And the third is politics, the struggle within each government for power. In the normal story, let's take China today, China, as it realizes its dream to be great again, the great rejuvenation of the great Chinese people. It's not about the U.S.—this is not about displacing the U.S. This is simply about China taking miserably poor people and making them less poor. And then taking people who have a little bit of money and making them moderately well off and taking moderately well off and having them very well off. The aspiration for Chinese to become wealthy is a noble, reasonable, understandable aspiration.

But the impact of that on America as its accustomed to being at the top of every pecking order, the number one trading partner, the largest number of billionaires, the leader of AI or whatever, is uncomfortable. The same way it was for Britain as it saw Germany grow strong, the same way it was for Sparta as it's all Athens grow stronger. So in that, first you have reality, the objective conditions.

Secondly, the objective conditions are processed through perceptions and emotions and psychology, which often leads to misperceptions. In Thucydides line, it was the fear that this instilled in Sparta.

A combination of perception and emotion and psychology, which often becomes misperceptions and even miscalculation. And finally, politics in which in competitive politics within each government, nobody wants to have any opponent to his right on a national security issue. Everyone struggles to be tougher than his political opponents. And actually in the current debate within Washington, you can see democrats positioning to run from the right of Trump against China, which seems hard to believe. But that's the way politics works, especially the politics of national security issues. So stack these three things on top of each other, reality perception, politics, and this creates a huge vulnerability to some extraneous action

or some third party action, that becomes a trigger that produces a spiral that produces the war.⁶

AS INDIVIDUALS, HOW DO THE CURRENT LEADERS OF THE U.S. AND CHINA AFFECT THE LIKELIHOOD OF THUCYDIDES’S TRAP PLAYING OUT AND LEADING TO WAR?

On President Xi

One person who clearly gets [the dangers of the Thucydides’s Trap] is President Xi Jinping. And as he frequently says, the challenge for China is, and the challenge for the U.S. and China, is to build a new form of great power relations. And that if we were successful in building a new form of great power relations, we could avoid the Thucydides’s Trap. As somebody who works directly for President Xi said to me, “Why do you think President Xi talks about a new form of great power relations? What’s wrong with the old form?” He said the reason why is because we know the old form follows in the footsteps that have been treaded by so many different countries over the centuries of history to a conflict, often a catastrophic conflict, and that’s not where we want the U.S.-China relationship to go. So in order to prevent that, we need to have a new form of great power relations.⁷

On President Biden

I think the good news about Biden is that he is somebody who is well-grounded and has thought about international affairs for all of his adult life. I’ve known him now for more than four decades. He has been in the Senate, he’s been the chairman of the Foreign Relations Committee, and he has been the vice president. He and Xi Jinping have probably spent more time together than any other leaders, other than Putin, or before

⁶ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

⁷ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

that, Lee Kuan Yew. They understand each other. So, when they had this phone call [in February 2021], they were not starting from scratch. They're building on a relationship that's already developed.⁸

Biden knows full well that the United States and China share a small globe on which each faces existential challenges it cannot defeat by itself. Technology and nature have condemned these two great powers to find ways to live together in order to avoid dying together. As a veteran Cold Warrior, Biden understands in a way most of today's generation do not that we continue to live in a MAD world. He recalls how difficult it was for American policymakers to get their minds around the concept of nuclear MAD—mutually assured destruction—and to accept its strategic implications for sane statecraft.⁹

CAN IDEOLOGICAL DIFFERENCES BETWEEN THE U.S. AND CHINA POSSIBLY BE MANAGED? OR WILL THEY BE MORE LIKELY TO INTENSIFY?

Intensify. Fundamental differences between the U.S. and China about individual freedom, human rights, and democracy will become more visible in Biden's Democratic administration than they were under Trump. Human rights advocates are a more influential part of Democratic voters, and the Biden campaign signaled that it would be more vigorous in calling out Chinese violations. Moreover, all Americans subscribe to our Declaration of Independence's claim that all human beings are endowed by their Creator with unalienable rights including "life, liberty, and the pursuit of happiness." This includes everyone: ordinary Chinese, residents of Hong Kong, Uyghur in Xinjiang—all 7.8 billion individuals on this planet today. Americans also believe that democracy is the best form of government for ensuring citizens' liberty.

Of course, thoughtful Americans know that these are aspirations, not accomplishments, and that our democracy is, as we say, a "work in progress." In *Destined for War*, I state unambiguously my judgment that today, American democracy is dysfunctional—D.C. having become

⁸ Graham Allison, "Thucydides's Trap Revisited: Prospects for China-US Relations." CCG Global Dialogue with Henry Huiyao Wang and Li Chen, April 6, 2021.

⁹ Graham Allison, "Joe Biden's Challenge: How to Avoid a U.S.-China War." *The National Interest*, December 18, 2020.

an acronym for “Dysfunctional Capital.” President Biden has announced clearly that his first and most important challenge will be to reunify a deeply divided nation to show that our democracy can work for all our citizens. But our failures provide no excuse for others’ shortcomings. Nor will our failures to realize our aspirations prevent us from criticizing others’ failures.¹⁰

IN WHAT WAYS ARE THE U.S. AND CHINA SIMILAR TO EACH OTHER? IN WHAT WAYS ARE THEY FUNDAMENTALLY INCOMPATIBLE?

Writing in the Asahi Shimbun in December 2017, Professor Allison argued that the U.S. and China are similar in some respects, such as that they both see themselves as rather exceptional and superior to other countries. However, he also writes that they have very different conceptions of world order:

Chinese believe in harmony through hierarchy, both at home and abroad. To see how they propose to order Asia, examine the way they order their own society. By contrast, Americans urge other powers to accept a ‘rules-based international order.’ But in Chinese eyes, this appears to be an order in which Americans make the rules, and others obey the orders.¹¹

Writing in Foreign Affairs in 2017, Professor Allison describes at length how, in the case of the U.S. and China, there is a certain “civilizational incompatibility” between the two countries which may increase the risk of Thucydides’s Trap and intensify bilateral competition. Professor Allison writes that these differences are most visible in the divergence in U.S. and Chinese conceptions of key building blocks of society and the world order. Professor Allison recognizes that the differences he describes are sweeping generalizations, by necessity reductive and not fully reflective of the complexities of American and Chinese society. But he argues that they also provide important reminders that policymakers in the United States and China should keep in mind to avoid war. For example, with respect to ideas of the state, he writes:

¹⁰ <https://www.globaltimes.cn/page/202012/1209820.shtml>.

¹¹ Graham Allison, “Avoiding a Sino-American War.” News, *Asahi Shimbun*, December 22, 2017.

Americans see government as a necessary evil and believe that the state's tendency toward tyranny and abuse of power must be feared and constrained. For Chinese, government is a necessary good, the fundamental pillar ensuring order and preventing chaos. In American-style free-market capitalism, government establishes and enforces the rules; state ownership and government intervention in the economy sometimes occur but are undesirable exceptions. In China's state-led market economy, the government establishes targets for growth, picks and subsidizes industries to develop, promotes national champions, and undertakes significant, long-term economic projects to advance the interests of the nation.

Professor Allison goes on to write about how the two countries also have different ideas about the role of the individual. He writes that for the U.S., individual liberty is a core value enshrined in the Declaration of Independence, which proclaims that “all men are created equal” and that they are “endowed by their Creator with certain unalienable Rights.” The declaration specifies that these rights include “Life, Liberty and the pursuit of Happiness” and asserts that these are not matters for debate but rather “self-evident” truths. In GA’s view, as Americans understand it, individual liberty disrupts hierarchy; in the Chinese view, it invites chaos.

Chinese culture does not celebrate American-style individualism, which measures society by how well it protects the rights and fosters the freedom of individuals. Indeed, the Chinese term for “individualism”—*gerenzhuyi*—suggests a selfish preoccupation with oneself over one's community. China's equivalent of “give me liberty or give me death” would be “give me a harmonious community or give me death.” For China, order is the highest value, and harmony results from a hierarchy in which participants obey Confucius' first imperative: Know thy place.¹²

Professor Allison goes on to argue in the same article that this understanding of hierarchy is applied not only within domestic society, but also to the world of global affairs. He says that the Chinese view is that China's proper place is at the top of the hierarchy, while other countries are to play the role of “subordinate tributaries.” But as he points out, the U.S. view is somewhat different and in conflict with this Chinese worldview.

¹² Graham Allison, “China vs. America.” *Foreign Affairs*, August 15, 2017.

Since at least the end of World War II, Washington has sought to prevent the emergence of a “peer competitor” that could challenge U.S. military dominance. But postwar American conceptions of international order have also emphasized the need for a rule-based global system that restrains even the United States.¹³

In the same article, Professor Allison, goes on to argue that both countries share one particular trait that might exacerbate the cultural clash: that is, that they both tend to have an “extreme superiority complex.” It is in both countries’ cultural DNA to see themselves as peerless and exceptional. But of course, in reality, only one of them can be number one. Professor Allison quotes Lee Kuan Yew, the former prime minister of Singapore, voicing concerns over whether the U.S. would be able to accept and adjust to a rising China, saying that “The sense of cultural supremacy of the Americans will make this adjustment most difficult.”

Professor Allison points out that Americans see themselves as the vanguard of civilization, especially when it comes to political development. For example, when the Declaration of Independence proclaims that “all men are created equal” and endowed with rights including “Life, Liberty and the pursuit of Happiness,” the document asserts that these are “self-evident” truths that are not up for debate.

*At the same time, Professor Allison writes that Chinese exceptionalism is no less sweeping than America’s. He quotes the historian Harry Gelber, who writes that the Chinese empire saw itself as “the center of the civilized universe” and that during the imperial era, “the Chinese scholar-bureaucrat did not think of a ‘China’ or a ‘Chinese civilization’ in the modern sense at all. For him, there were the Han people and, beyond that, only barbarism. Whatever was not civilized was, by definition, barbaric.” As Professor Allison writes, China’s pride in its civilizational achievements remains strong to this day, citing a quote from President Xi’s 2014 book, *The Governance of China*, that “China’s continuous civilization is not equal to anything on earth, but a unique achievement in world history.”¹⁴*

¹³ Graham Allison, “China vs. America.” *Foreign Affairs*, August 15, 2017.

¹⁴ Graham Allison, “China vs. America.” *Foreign Affairs*, August 15, 2017.

WHAT DOES CHINA WANT? DOES CHINA WANT TO DISPLACE THE U.S. IN ASIA?

What does President Xi Jinping want? In one line: to “Make China Great Again”.¹⁵

[Xi’s] “China Dream” combines prosperity and power—equal parts Theodore Roosevelt’s muscular vision of an American century and Franklin Roosevelt’s dynamic New Deal. It captures the intense yearning of a billion Chinese: to be rich, to be powerful, and to be respected. Xi exudes supreme confidence that in his lifetime China can realize all three by sustaining its economic miracle, fostering a patriotic citizenry, and bowing to no other power in world affairs.¹⁶

One of the questions [we asked Lee Kuan Yew] was: are China’s current leaders, that’s Xi Jinping and the Communist Party, serious about displacing the U.S. as the predominant power in Asia in the foreseeable future? Chinese usually find this question very uncomfortable. China scholars find it even more uncomfortable. So, you cannot get most Chinese scholars to answer this question. Lee Kuan Yew was eighty-eight years old. So, he said he just tells things as he sees them. What does he say? Of course. Why not? Who can imagine otherwise? How can China not aspire to be number one in Asia at that time in the world?¹⁷

ARE THE U.S. AND CHINA REALLY IN A “COLD WAR”?

Well, the answer is—unfortunately, I’m a professor, so it’s complicated—and the answer is yes and no. But if I had to choose just one, I would say no. So let me explain briefly. Is the relationship between the U.S. and China a rivalry? A rivalry that’s basically captured appropriately by Thucydides in his description of what happens in a competition between two states when the seesaw of power on which they are sitting is rapidly shifting, so that initially I’m competing with you in which I look down on

¹⁵ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

¹⁶ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

¹⁷ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

you or up on you, depending on where the seesaw is, and all of a sudden, it's moving at the same time.

So, the Thucydidian rivalry I describe in the book, I think that's the best diagnosis of the problem that we face, so I take that to be the reality of the situation. But at the same time, the U.S. and China live on a small planet, in which both have superpower nuclear arsenals, and in which both emit greenhouse gases into the same constrained biosphere. And, therefore, in which either of them, by themselves, can ruin the world for both itself and the other. So we're basically inseparable, conjoined Siamese twins, if you want a metaphor. And however hostile I may feel towards by competitor, however deserving he may be of being strangled, if I were to ever yield to this temptation and one strangled the other, it would be committing suicide at the same time. You look at that and you say, I have a vital national interest in my survival, which requires my finding a way to coexist with you, even while at the same time I'm engaged in a fierce rivalry with you. I would say that's the description of our problem, and the reason why it's quite different from the Cold War. Because the idea that there might be a new economic iron curtain in which the U.S. is on one side and everybody else will join the U.S., and China is on the other side, makes no sense, since China is the major trading partner of everybody, China is a backbone of the global economy. So while there are some similarities between the competition, between U.S. and China, similarities with what we experienced in the Cold War, the differences are also huge, in particular, the economic difference.¹⁸

ARE CHINA AND THE U.S. GOING TO DECOUPLE?

The term decoupling resonates, and when Trump began to talk about it, the press actually, you know, amplifies it. But if you look at the reality, the trade between U.S. and China is thicker now than it was before we started decoupling. So, in spite of the trade war, we're back to the level of trade that we had before the trade war. Part of reason for that is that Americans are consumers, and China is the world's most successful producer of consumer goods. So, where are iPhones assembled? China. Where do batteries for electronic vehicles come from? From China—or the elements are from China. We can go down the list. Basically, the

¹⁸ Graham Allison, “The Future of Great Power Relations: How Can the US and China Co-exist?” CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

economic relationship has continued to thicken, at the same time there's been this pushback in certain areas. And there are some items, particularly advanced semiconductors, that the Trump administration denied China, that had a big impact on some industries in China, though China is developing the capacity to manufacture its own semiconductors for most of the categories, not just the most advanced. So I think that we'll end up with efforts to decouple certain arenas, or I would say, put a security fence around some items that have military or security applications, but those are very few. Then we'll have a lot of protectionism, which is what you can currently see unleashed in a good part, unfortunately, in Biden's "Build Back Better" program. And if you listened to the State of the Union speech last night, where the effort to manufacturer things in the U.S. that China can actually manufacture at half the price or two thirds the price, will simply mean paying more for the equivalent items. So figuring out a way in which the comparative advantages of the US in goods and services we can produce, can complement the comparative advantages of China, which include, essentially, dominance in manufacturing commodity products. Not only that, but at least that. But those happen to be the things that end up filling up Walgreens, Target, and Home Depot, and finding a way then to deal with what's inevitably been a trade deficit. That's a challenging item, and especially challenging in the politics of the two countries, and especially for the U.S. But I think, going forward, because in the security arena, for sure, China and U.S. are conjoined Siamese twins, whom if they were ever to have a nuclear war, would destroy each other. For sure, I would say, in the climate space, unless they can find a way to constrain greenhouse gas emissions, they will both spoil the biosphere for both of us. And I think even the economic arena, there's some analog of that we have yet to kind of work our way through.¹⁹

¹⁹ Graham Allison, "Thucydides's Trap Revisited: Prospects for China-US Relations." CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

CAN THE THUCYDIDIAN DYNAMIC REALLY LEAD TO WAR IF BOTH SIDES KNOW THAT WAR MAKES NO SENSE?

Most people today have no idea what war means. Go back to World War II, during which 50 million people were killed, which is just unimaginable. What would a nuclear war mean today? A nuclear war could literally mean that Beijing is gone, disappeared. Boston, gone, disappeared. It's hard to imagine, but the physical consequence of a full-scale war between the U.S. and China could kill every last Chinese and every last American. Anybody who survived would later say, these people were out of their minds. How did they ever let this happen? How come they didn't appreciate what a danger this was? And if they had thought about it, and then they said, well, but something happened in Taiwan, and China did this, or the U.S. did that, and one thing led to the other and at the end, there was a war. They would ask, but did that make any sense?

It makes no sense, in the same way how people look at Europe at the end of 1918, when World War I was over; Europe, which had been the centerpiece of civilization for 500 years, had destroyed itself. Europe never became a major player in the world again in the way that it had been for the previous 500 years. Why? Because some Archduke was assassinated by a terrorist, and then “one thing led to the other” and within five weeks, all the nations of Europe were consumed by a war that made no sense. So, the painful fact that Chen Li reminds us of [is that] today nobody has really internalized how horrible a real full-scale war could be and how insane it would be.

Fortunately, there's nobody in the Pentagon who believes that war with China is a good idea, not one single person. I believe there isn't a single person in the PLA who believes that war with the U.S. would be a good idea. That's good. But our societies need to understand this.

Even the fact the two parties understand that war is not possible doesn't mean war can't happen. Because some spiral of reactions [can] pull you somewhere we don't want to go.²⁰

²⁰ Graham Allison, “Thucydides's Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

CAN SHARED THREATS REDUCE THE CHANCE OF WAR?

Well, I would say survival is a very powerful, sturdy imperative. Nations rarely are leaders and sane leaders of nations rarely commit suicide for their country. Maybe we can probably find some examples, but it's a very, very, very rare. So if the sane leaders of China and the U.S. and we have quite sane leaders in both Biden and Xi, look at the world and say, what's happening if there should be a nuclear war between the two of us. They quickly get to the right conclusion: bad idea.

If they look at the climate challenge over the long run, they can see that either party by itself, on the current trajectory, can emit so much greenhouse gas that the whole biosphere will become unlivable for everybody. So bad idea. The pandemic is interesting, though the prospect of having impermeable walls around the country to prevent 100% of the penetration by viruses is a losing battle. It doesn't mean that the Chinese strategy for trying to find cases when they occur and limit their spread, actually—it's turned out to have been more certainly and more successful than the American strategy—but it still is not a zero world. Viruses and bacteria will get through borders, so again, shared interest in trying to prevent that, or find ways to deal with it.

In nuclear proliferation, we're seeing this with the Iranian negotiations that are going on right now. So what can they do? So I think there are many areas like that should motivate two rational countries to find ways to cooperate in spite of the fact that they will be competitive at the same time. So that creates a compelling reason for Americans and Chinese at all levels to be talking about dangers that could get out of control and ask, what can we do about this cooperatively with respect to North Korea? What can we do about differences over Taiwan? What can we do about patrols in the South China Sea or the East China Sea?²¹

HOW HAS THE PANDEMIC CHANGED THE COURSE OF U.S.-CHINA RELATIONS?

In speculating about the world after coronavirus, Thucydides would begin with structural realities. Just as he identified that the rise of Athens and the fear it inspired in Sparta made war nearly inevitable, he would note that

²¹ Graham Allison, "The Future of Great Power Relations: How Can the US and China Co-exist?" CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

the defining feature of international politics going forward will continue to be an analogous rivalry between a rising China and a ruling United States. Coronavirus has now become another dimension along which these rivals are waging their competition. How each nation addresses this challenge and how their response affects their nations' gross domestic products (GDPs), their citizens' confidence in their government, and their standing in the world will become another strand in this rivalry.²²

We have to recognize that this coronavirus threat is layered on top of deep, inescapable structural realities. China is a meteoric rising power that really is threatening to displace the U.S. from positions we have come to believe are our natural positions at the top of every pecking order. In short, this is a classic Thucydidean rivalry—with all that implies (including the genuine risk of a catastrophic war neither nation wants).

To complicate the picture further, each country's successes and failures in its own “war” against coronavirus—including the race for a vaccine—will inescapably become a significant feature in this rivalry. Since this virus respects no borders, even if one nation succeeds in driving the rate of new domestic infections to zero, when its citizens return from abroad, they can bring this virus with them creating further waves of infections. Thus, victory for each will require an effective vaccine. At the same time, as China has succeeded in not just flattening, but bending the curve of new infections toward zero, while the U.S. has floundered, no amount of rhetoric will be able to disguise this bottom line. The consequences for the overall competition, for judgments about the relative merits of democracy versus autocracy, and for America's standing in the world will be profound.

Democracies are historically slow to awake to challenges, and slow to respond—none more so than the U.S. But once their mind is focused, their response is formidable. Had the great wars the U.S. has fought over the centuries—from the 13 colonies' revolution to free themselves from British domination to World War II—ended after the first quarter, the U.S. would have been declared the loser. So in the longer “war” against coronavirus, it would be premature to count the U.S. out. As the world's

²² Graham Allison, “The US-China Relationship After Coronavirus: Clues from History.” *COVID-19 and World Order*. Ed. Hal Brands and Francis J. Gavin. Johns Hopkins University Press, 2020, pp. 390–391.

most successful investor, Warren Buffett, repeatedly reminds investors: no one ever made money in the long run by selling America short.²³

WHAT DOES THE WAR IN UKRAINE MEAN FOR U.S.-CHINA RELATIONS?

In his dialogue with CCG on March 3, 2022—shortly after Russia’s invasion of Ukraine—Professor Allison shared the following thoughts:

[The apparent alignment between China and Russia] defies geopolitical gravity, since in principle, if you were just a Martian analyst, you would say China and Russia have many more reasons to be adversarial than to be allied. They have a lot of territory that used to be called China that’s now called Russia, including a port that the Russians called Vladivostok, but on Chinese maps still has the Chinese name. They have a huge area in Siberia that has no people, virtually and is full of resources. On the other side of a border, you have hundreds of millions of people and no oil and gas or other resources. So I can think of a solution to that problem. Then you go through this list and you say, how can the two states in the world that should naturally be antagonistic be as operationally aligned as they are?

And I’d said these two big factors. First is China’s brilliant diplomacy, especially Xi’s, in finding a way to court and coddle Putin and even to make him feel comfortable as a junior partner, without ever saying so. Who is the first person Xi visited when he became president? Putin. Whom did he spend his birthday with? Putin. Who was the first person that pops up at every Chinese meeting after Xi? Putin. Who was the first person he met with in person for two years, a foreign leader, there at the summit, at the beginning of the Olympics, February 4? Putin. So Xi has done a great job of that.

And secondly, the U.S. has, in targeting both China and Russia as adversaries, and trying to isolate the two of them, has missed the fact that the enemy of my enemy is a friend. That’s the geopolitics 101. So, we’ve been pushing China and Russia closer together. Well, this is just the opposite of the trilateral diplomacy that we’re remembering the 50th anniversary of now. This is like Xi has learned the lesson better than Americans have. So I would say that as we watch what’s now happening, China

²³ <https://www.globaltimes.cn/content/1209820.shtml>.

is stressed, because what Russia is doing blatantly contradicts China’s fundamental principles for international relations. But China not only says, but I think the Chinese government believes in the foundations of the UN Charter, including sovereignty and territory integrity. No one can deny that Russia’s invasion, coming on the heels of it previously seizing Crimea, is not consistent with territorial integrity. So that’s made the job of the Foreign Ministry very difficult. And you could have seen them been trying to figure out some paths here. But at the same time, I argue in this piece that given China’s interests, where it has to make hard choices, it will have Putin’s back. And so far, I think that’s what we are observing. One last point, I was interested that yesterday, Wang Yi, the Foreign Minister, had a conversation with the Ukrainian foreign minister, in which, according to the Foreign Ministry’s account of the conversation, he said China was eager to play a role in helping to negotiate a cease-fire now and a resolution of these issues in which Ukraine would be a neutral state. So I think it’s likely that we’ll see more activities from China trying to play a role as a peace maker in this space, because that way that’ll soften the fact that at the same time it’s protecting Putin’s back, including in the vote today in the UN, in which it abstained, rather than criticizing Russia for invading Ukraine.²⁴

ON PATHS TO WAR

Wars occur even when leaders are determined to avoid them. Events or actions of others narrow their options, forcing them to make choices that risk war rather than acquiesce to unacceptable alternatives. Pericles did not want war with Sparta. The Kaiser did not seek war with Britain. Mao initially opposed Kim Il-sung’s attack on South Korea in 1950 for fear of blowback. But events often require leaders to choose between bad and worse risks. And once the military machines are in motion, misunderstandings, miscalculations, and entanglements can escalate to conflict far beyond anyone’s original intent.

—Graham Allison²⁵

²⁴ Graham Allison, “The Future of Great Power Relations: How Can the US and China Co-exist?” CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

²⁵ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

In Destined For War Professor Allison sketches five plausible “paths to war” between the U.S. and China. He has developed and expanded on these “paths to war” in his work since the book was published. In the scenarios that Professor Allison has developed, sequences of events that could lead to war begin with potential “sparks” such as an accidental collision at sea, a move by Taiwan towards independence, war provoked by a third party, North Korean collapse, or an escalation from economic conflict to military war. These are followed by “accelerants” that can turn a spark into war, “like gasoline to a lit match.”

Some of these accelerants are related to the “fog of war”—the uncertainty that can make policymakers act aggressively when they may act with more caution if armed with the full set of facts. One example of this that Professor Allison cites is in 1964, when a false alarm over a second attack on the USS Maddox in the Gulf of Tonkin sowed the seeds for the U.S. to declare war on North Vietnam. He also points out that disruptive technologies and weapons such as cyberattacks exacerbate this risk of escalation, because disrupted communications would intensify the “fog of war,” causing confusion that could increase the chances of miscalculation. The rest of this chapter highlights Professor Allison’s views on the lessons from history on how wars start and the most dangerous potential sparks for a U.S.-China conflict.

WHAT DOES HISTORY TELL US ABOUT HOW WARS BEGIN ONCE THE CONDITIONS OF THUCYDIDES’S TRAP ARE IN PLACE?

Think of 1914. In my book [*Destined for War*], I have a chapter on what happened in 1914. You had a rivalry between Germany rising and Great Britain. An archduke who was a second level official from Austria-Hungary was assassinated in Sarajevo in June 1914. He was not connected to Britain. He wasn’t connected to Germany. But that action and the reactions to it within six weeks had the whole of Europe at war with each other. And in four years had destroyed all of Europe and Europe’s position as the leader of the world at that time. So, third party

actions or accidents, external behavior, can produce this set of reactions, especially in a period of vulnerability.²⁶

WHAT ARE THE POTENTIAL SPARKS FOR A U.S.-CHINA CONFLICT?

The possibility of an actual shooting war between the U.S. and China, incredible as it seems, and as insane as it would be if it happened, is much greater than most people appreciate. As the U.S. is increasingly alarmed at finding a rising China threatening to displace us from our position of leadership in every arena, and as China pushes back to ensure that it can achieve its China Dream, both should be acutely aware that in 12 of 16 cases over the last 500 years, Thucydidean rivalries ended in real war.²⁷

On Taiwan

For China, Taiwan is a “core interest”—regarded as much a part of China as Alaska is to the U.S.. Any attempt by Taiwan to become an independent country could easily become a *casus belli*. In 1996, when the Taiwanese government took initial steps toward independence, China conducted extensive missile tests. The Clinton administration moved two U.S. carriers into the area, forcing China to back down. Ever since, China has been building up specific military capabilities—such as anti-carrier missiles—to ensure it need never concede again. If a single U.S. carrier were sunk in a similar showdown today, the deaths of 5,000 Americans could set the U.S. and China on an escalatory ladder that has no apparent stopping point.²⁸

On the worry side, Taiwan is a great candidate for a ticking time bomb that could lead to a tragic conflict [...] In Taiwan, the U.S. and China have together, for now 50 years, managed to a degree of ambiguity a successful run in which neither China nor Taiwan nor the U.S. have ever seen such an extended period of prosperity and peace, with a lot

²⁶ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

²⁷ <https://www.globaltimes.cn/content/1207739.shtml>.

²⁸ <https://www.globaltimes.cn/content/1207739.shtml>.

of discomfort and a few crises and difficulties nonetheless. So could that go wrong? Absolutely.²⁹

On North Korea

If [North Korea] goes back to testing ICBMs that could give them a reliable capability to strike the American homeland, I can easily imagine even in the Biden Administration strikes on North Korea. And then where do we go from there? And we should remember the Korean War, in which Americans and Chinese fought each other.³⁰

No one should ever forget how events in 1950 led to a big war in which tens of thousands of Chinese and American soldiers killed each other. Kim Jong-un's grandfather launched a surprise attack on South Korea and within three months was on the verge of reunifying the peninsula. At the last moment, the U.S. came to the South's rescue. When U.S. troops crossed the 38th Parallel and were approaching the border with China, Mao Zedong sent almost a million men to war with the U.S. They succeeded in pushing the U.S. back down the peninsula to the 38th Parallel, where the U.S. sued for peace.³¹

On the South China Sea

From the perspective of Washington, a rising China is seeking to undermine the rule-based international order.

In contrast, as it looks out from its own coastline, China sees China's seas. In the waters along its border, China is demanding that others, starting with the United States, accept its predominance as surely as they have accepted America's special provenance in the Caribbean.

As realistic students of history, Chinese leaders recognize that the role the U.S. has played since World War II as the guardian of regional stability has been essential to China's rise. But they believe that as the tide that brought the U.S. to Asia recedes, America must leave with it. As President

²⁹ Transcript of Ambassador Cui Tiankai's Dialogue with Professor Graham Allison at the Annual Conference of the Institute for China-America Studies. <https://www.mfa.gov.cn/ce/ceus//eng/zmgxss/t1838064.htm>.

³⁰ Transcript of Ambassador Cui Tiankai's Dialogue with Professor Graham Allison at the Annual Conference of the Institute for China-America Studies. <https://www.mfa.gov.cn/ce/ceus//eng/zmgxss/t1838064.htm>.

³¹ <https://www.globaltimes.cn/content/1207739.shtml>.

Xi Jinping told a gathering of Eurasian leaders in 2014: “It is for the people of Asia to run the affairs of Asia, solve the problems of Asia and uphold the security of Asia.” The attempt to persuade the U.S. to adjust to this new reality has been most intense in the South China Sea. An area approximately the size of the Caribbean and bordered by China and six Southeast Asian nations, the sea includes several hundred islands, reefs, and other features, many of which are under water at high tide.

[...] As the contest in the South China Sea unfolds, it will be shaped by the basic strategic assumptions and blind spots of both the United States and China. That means America will continue to play a game of chess while China rearranges the stones on its *weiqi* board, working methodically to affect a gradual yet overwhelming change in this nearby theatre.³²

WHAT MAKES TAIWAN A DANGEROUS POTENTIAL FLASHPOINT? HOW CAN THIS RISK BE MITIGATED?

As Taiwanese watch carefully what has been happening in Hong Kong, they have grown less and less interested in living in China’s party-driven autocracy. The idea of one nation under two systems as a mantle for sustaining its autonomy is now dead. If, in riding the surge created by the overwhelming vote against the mainland earlier this year, the Taiwanese government were to make a sharp move toward greater independence, most China watchers agree Beijing would have to respond violently. No government in Beijing could survive the “loss” of Taiwan. If the Chinese response included a 21st-century version of the missile tests they conducted in 1996 that threatened to choke Taiwan’s lifeline of ships delivering oil, food and other essential supplies, how would the U.S. respond?³³

[I]f the U.S. should decide to come to the defense of Taiwan, what would the likely outcome of that conflict be? Moreover, if the U.S. were on the verge of defeat in a local war over Taiwan, would it accept defeat, or choose to escalate? And if it did, where could that end?

³² Graham Allison, “Chinese Content to Play the Long Game.” *Herald Sun*, July 11, 2017.

³³ Graham Allison, “Beyond Trade: The Confrontation Between the U.S. and China.” *The Security Times*, February 2020.

Obviously, this has increasingly been a subject of discussion in both the U.S. and China. Because there are no good answers to any of these questions, the lesson for us all is to recognize the risk and act in advance to prevent crises that could lead to confrontations and conflict that could escalate to catastrophic war. Success in preventing Taiwan becoming the Sarajevo of the twenty-first century will require extended, thoughtful, candid conversations between Xi and Biden and the governments they lead. The lack of such communication today leaves both nations vulnerable to an accident or incident that could lead to outcomes that would be catastrophic for both nations.³⁴

COULD THIRD-PARTY PROVOCATIONS REALLY SEE U.S. AND CHINA COME TO WAR?

As Professor Allison writes, the outbreak of the Korean War in 1950 stands as a sharp reminder of great powers' vulnerability to the impact of third-party provocations.

Could North Korea's Kim Jong-un trigger a war between the United States and China? If that seems inconceivable, then consider what his grandfather did. In January 1950, war with China had no place on the American agenda. That option had been considered during the Chinese Civil War but decisively rejected—since it would mean sending American troops to fight on the Asian mainland. In 1950, Mao had just led China's Communists to victory in a long bloody civil war and was focused on consolidating control of his country. The thought of war with a nation that had an economy fifty times his size, a monopoly of nuclear weapons, and had just dropped atomic bombs on Japan five years earlier to end World War II was unthinkable.

But in June 1950 North Korea launched a surprise attack on South Korea. In just three months it stood on the verge of success in seizing the peninsula. At the last minute, the United States came to the rescue. Gen. Douglas MacArthur and two divisions of U.S. forces still in occupied Japan landed in Korea and rapidly fought the North Koreans back up the path they had come down. Without properly considering the consequences, they crossed the 38th Parallel—the dividing line between the two Koreas—and were driving toward the Chinese border expecting to

³⁴ <https://www.globaltimes.cn/page/202109/1235155.shtml>.

unify the country before Christmas. But then, out of the blue and to McArthur’s astonishment, they awoke one morning to find themselves under attack by three hundred thousand Chinese. These were soon reinforced by a half million additional troops who beat the Americans back down the peninsula to the 38th Parallel where the United States sued for peace. Most of the fifty thousand Americans who died in this war were killed by Chinese; and most of the hundreds of thousands of Chinese fatalities came at the hand of Americans.³⁵

CAN ECONOMIC CONFLICT LEAD TO A REAL WAR?

To illustrate how economic conflict can create a slippery path that leads to military conflict, Professor Allison reminds us how U.S. economic sanctions on Japan and the resulting pressure on the country contributed to Tokyo’s decision to attack Pearl Harbor.

To punish Japan for its military aggression against its neighbors in the late 1930s, the United States had initially imposed sanctions, and later an embargo on exports of high-grade scrap iron and aviation fuel to Japan. When these failed to stop its expansion, Washington ratcheted up the pressure by including essential raw materials such as iron, brass, and copper. Finally, on August 1, 1941, Franklin D. Roosevelt announced that the United States would embargo all oil shipments to Japan. Eighty percent of Japan’s oil came from the United States, and Japan’s military forces required that oil to operate at home as well as across the Greater Co-prosperity Area in Northeast Asia. Facing what it saw as a choice between slow but sure strangulation, on the one hand, and taking an extreme chance that offered hope of survival, on the other, the government chose to take its chance with what it hoped would be a “knockout blow”—a bold preemptive attack aimed to destroy the U.S. Pacific Navy stationed at Pearl Harbor. As the designer of the attack, Admiral Isoroku Yamamoto, told the emperor: “In the first six months to a year of war against the U.S. and England, I will run wild, and I will show you an uninterrupted succession of victories.” But he went on to warn: “Should the war be prolonged for two or three years, I have no confidence in our ultimate victory.”³⁶

³⁵ Graham Allison, “How Trump Could Stumble from a Trade War into a Real War with China,” *The National Interest*, April 20, 2018.

³⁶ Graham Allison, “Could Donald Trump’s War Against Huawei Trigger a Real War with China?” *The National Interest*, June 11, 2020.



CHAPTER 4

Avenues of Escape

History is not, of course, a cookbook offering pretested recipes. It teaches by analogy, not by maxims. It can illuminate the consequences of actions in comparable situations, yet each generation must discover for itself what situations are in fact comparable.

—Henry Kissinger¹

The longer you can look back, the farther you can look forward.

—Winston Churchill²

Men at some time are masters of their fates: The fault, dear Brutus, is not in our stars, But in ourselves, that we are underlings.

—Cassius to Brutus in *Julius Caesar* by William Shakespeare

*If the U.S. and China are to avoid war, then the first step is to recognize the danger that arises from the structural reality of a “rising” China facing a “ruling” U.S., regardless of the intentions of either side. Professor Allison’s book *Destined for War* and his development and popularization of the concept of Thucydides’s Trap has made a major contribution by alerting policymakers in Washington and Beijing to this vulnerability.*

¹ Henry Kissinger, *The White House Years*.

² Winston Churchill, speech in 1944.

Since the publication of Destined for War, Professor Allison has been working to identify ways to escape Thucydides's Trap and avoid war between the two great powers. Just as he has used history to highlight the dangers of Thucydides's Trap, Professor Allison has again turned to history for examples and inspiration on how to prevent a war from occurring.

In the last chapter of Destined for War Professor Allison already outlined "12 clues for peace" that drew on four cases in the last 500 years when rising and ruling powers managed to navigate through treacherous waters and avoid war. He has since cast the net wider for historical examples we can draw on, advocating for the use of "applied history" to learn from the past to make sure that we can avoid mistakes and chart a course towards a peaceful future. This search for "avenues of escape" has taken Professor Allison back into Chinese history, the Cold War, and other eras to find ideas that the current U.S. and Chinese governments could combine into a 21st century solution to meet the challenges they face today and manage a "rivalry partnership" in a world "safe for diversity."

RECOGNIZE AND ACCEPT STRUCTURAL REALITIES

WHERE SHOULD WE START IF WE WANT TO AVOID A WAR BETWEEN THE U.S. AND CHINA?

So first would be the recognition. This came from a Chinese friend. He said, why don't we simply recognize that the threat to us comes from this Thucydidian dynamic?

We are both faced with a condition, a structural condition in which China is rising and will continue to rise for its own benefit, not about you. And you will continue, Americans, to try to maintain leadership in an international order, because this is provided seven decades without great power war and this has been great for the world, and you think this is your mission. This rivalry, we recognize, creates this vulnerability. Let's take that to be the puzzle and ask how in a new form of great power relations, we can manage that vulnerability to prevent some third-party action provoking us in a way that produces a war. What would that mean?

First, recognizing the systemic threat. This is a systemic threat that comes from structural reality, not from the intention of either of the parties.

Secondly, jointly preventing crisis. So joint actions in crisis prevention. Asking, how could Taiwan do something that drags us into war?

And then considering today, what we could do now, in advance of that, to prevent that from happening? Asking, how could events in North Korea drag the U.S. and China into a war? What could we do today to deal with that? How could an accident in the South China Sea produce an escalation? What could we do today to deal with that?

Basically identify paths to war, crisis prevention, and finally crisis management, prepare for crisis, because we know despite our best efforts to prevent crisis, some stuff will happen. And so when stuff happens, you want to have established lines of communication. You want lines of communication at multiple levels. You would like to have military-to-military conversation so that you're able to talk very candidly. Those are three elements of what would essentially be of managing a condition.³

WHAT KIND OF MINDSET IS NEEDED IF WE ARE TO ESCAPE THUCYDIDES'S TRAP?

In his 1936 essay, "The Crack-Up," Scott Fitzgerald writes that the test of a first-class mind is the ability to hold two contradictory ideas in your head at the same time and still function. Idea one is that this is going to be a fierce competition, because both the U.S. and China are determined, to whatever extent they can, to be the biggest economy, the smartest economy, have the best AI, the best military, and be the biggest trading partner, and so on. When the Olympics occur, each nation will be seeking to win as much gold as they can. That's what the Olympics are. That's on the one hand.

On the other hand, at the same time, and somewhat in contradiction with the first idea, is the fact that unless the U.S. and China can find ways to coordinate and cooperate in dealing with climate, we will create a biosphere that nobody can live in. Unless the U.S. and China can find a way to cooperate to make sure third-party actions, like events over Taiwan or North Korea, don't spiral out of control, or we could end up in a real full-scale war. We could end up destroying both societies. Most people can't imagine what that means today, but during the

³ Graham Allison, "How to Escape the Thucydides's Trap" speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

Cold War, we used to look at target charts and calculate the destructive effects. It could literally be the case that if we had a full-scale nuclear war between China and the U.S., both China and the U.S. would be wiped off the map, they'd simply be gone as countries. But that's inconceivable. No human being can make sense of that, but that's the physical capability of the weapons that exist. So, we are compelled to cooperate, to avoid sequences of events that could lead to that result, and to avoid letting unconstrained greenhouse gas emissions create a globe that we can't live or breathe in.

So, how to do these two things at the same time? And how to explain this in the complicated politics of both countries? Because Americans look at China and say, "My God! How could China be rivalling us on all these fronts? We remember when China was small, poor, and backward as a developing country." And Chinese, when they watch what happened in Anchorage [the US-China meeting in March 2021] or other events, and when I read of people who watch Chinese social media, some people say, "Enough of this, we don't need to have an American lecturing us anymore. We have become bigger and stronger, we need to be more assertive." So, on managing the internal affairs of two great powers, I think Xi Jinping and Biden may be able to hold two contradictory ideas and function, but how can they manage their governments and their societies under these conditions? That's the problem I have been working on.⁴

ON THE VALUE OF APPLIED HISTORY

WHAT IS "APPLIED HISTORY" AND HOW CAN IT HELP US AVOID WAR?

For too long, history has been disparaged as a "soft" subject by social scientists offering spurious certainty. We believe it is time for a new and rigorous "applied history"—an attempt to illuminate current challenges and choices by analyzing precedents and historical analogues.⁵

⁴ Graham Allison, "Thucydides's Trap Revisited: Prospects for China-US Relations." CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

⁵ Graham Allison and Niall Ferguson, "Why the President Needs a Council of Historians." *The Atlantic*, September 2016.

Applied history is an emerging discipline that attempts to illuminate current predicaments and choices by analyzing historical precedents and analogues. Mainstream historians begin with an event or era and attempt to provide an account of what happened and why. Applied historians begin with a current choice or predicament and analyze the historical record to provide perspective, stimulate imagination, find clues about what is likely to happen, suggest possible interventions, and assess probable consequences. In this sense, applied history is “derivative: dependent on mainstream history in much the same way that engineering depends on physics, or medicine on biochemistry.”⁶

In the realm of science, there is mutual respect between practitioners and theorists. In the realm of policy, by contrast, there is far too often mutual contempt between practitioners and academic historians. Applied history can try to remedy that.⁷

HOW COULD A U.S. PRESIDENT USE APPLIED HISTORY TO MAKE MORE INFORMED DECISIONS?

In an article written for The Atlantic in 2016, Professor Allison suggests creating a “Council of Historians” for the US president.

[I]t is not enough for a president to invite friendly historians to dinner, as Obama has been known to do. Nor is it enough to appoint a court historian, as John F. Kennedy did with Arthur M. Schlesinger Jr. We urge the next president to establish a White House Council of Historical Advisers. Historians made similar recommendations to Presidents Carter and Reagan during their administrations, but nothing ever came of these proposals. Operationally, the Council of Historical Advisers would mirror the Council of Economic Advisers, established after World War II. A chair and two additional members would be appointed by the president to full-time positions, and respond to assignments from him or her. They would be supported by a small professional staff and would be part of

⁶ *Destined for War*, Text Copyright © 2017 by Graham Allison, Published by arrangement with InkWell Management LLC. All rights reserved.

⁷ Graham Allison and Niall Ferguson, “Why the President Needs a Council of Historians.” *The Atlantic*, September 2016.

the Executive Office of the President. [...] Were a Council of Historical Advisers in place today, it could consider precedents for numerous strategic problems. For example: As tensions increase between the U.S. and China in the South and East China Seas, are U.S. commitments to Japan, the Philippines, and other countries as dangerous to peace as the 1839 treaty governing Belgian neutrality, which became the *casus belli* between Britain and Germany in 1914?⁸

WHAT CAN WE LEARN FROM HENRY KISSINGER ABOUT HOW TO USE APPLIED HISTORY?

Tracing the story of how a young man from Nazi Germany became America's greatest living statesman, [historian Niall Ferguson] discovered not only the essence of Kissinger's statecraft, but the missing gene in modern American diplomacy: an understanding of history. [...] Asked by a student what someone hoping for a career like his should study, Kissinger answered: "history and philosophy"—two subjects notable for their absence in most American schools of public policy.

How did Kissinger prepare for his first major job in the U.S. government as national security advisor to President Richard Nixon? In his words, "When I entered office, I brought with me a philosophy formed by two decades of the study of history." [...] How does Kissinger apply history? Subtly and cautiously, recognizing that its proper application requires both imagination and judgment."⁹

ON REDEFINING THE RELATIONSHIP

WHAT EXAMPLES CAN WE DRAW FROM CHINESE HISTORY FOR IDEAS ON HOW TO ESCAPE THUCYDIDES'S TRAP?

[I]n the Song Dynasty, back a thousand years ago, in 1005, the Song, having found themselves unable to defeat the Liao, a northern Mongol tribe, negotiated the Chanyuan Treaty, in which as some historians have

⁸ Graham Allison and Niall Ferguson, "Why the President Needs a Council of Historians." *The Atlantic*, September 2016.

⁹ Graham Allison, "The Key to Henry Kissinger's Success." *The Atlantic*, November 27, 2015.

called it, they agreed to become “rivalry partners.” They defined areas in which they would continue to be rivals, but they had other areas in which they were thickly cooperating. In fact, it was a very peculiar arrangement, because even though the Liao agreed that the Song was the major dynasty, the tribute actually flowed from the Song to the Liao; the Song was paying the Liao. The deal was that the Liao had to take whatever tribute was paid and use it to buy things from the Song. [This created] an early version of the multiplier effect in economics. I know some Chinese don’t like this treaty because, for whatever reason, the Song dynasty is not appreciated sufficiently. That’s my poor man’s view of Chinese history, so apologies for that. But in any case, from my perspective, since I’m interested in avoiding war, it is the Chanyuan Treaty that preserved peace between the Song and the Liao for 120 years. I would say in the annals of history, a treaty that takes two parties who are in fierce rivalry and manages [to deliver] 100 years of peace between them has done a pretty good thing.¹⁰

Could American and Chinese statesmen construct a new strategic rationale for a “rivalry partnership” in which they would simultaneously compete and cooperate? The two nations will inevitably be fierce rivals in economic production and trade, advanced technology, military capabilities, forming alliances and alignments and demonstrating how governments can best meet the needs of their citizens. But at the same time, there are other arenas in which neither can ensure its most vital national interest of survival without serious cooperation from the other. These include not only avoiding war, especially nuclear war, but also tackling climate change to sustain a biosphere in which human beings can live, preventing the spread of the means and motives for megaterrorism, containing pandemics and managing global financial crises to avoid great depressions—and their political consequences. Thus, while intense rivalry is inescapable, if the brute fact is that neither can kill the other without simultaneously committing suicide, intense competition becomes a strategic necessity.¹¹

¹⁰ Graham Allison, “Thucydides’s Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

¹¹ Graham Allison, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.

WHAT MODELS OR INSPIRATION CAN WE DRAW FROM U.S. HISTORY?

[I]f they really are condemned to co-exist, as noted in answer to an earlier question, the U.S. and China have no choice but to find ways to manage these differences. As they explore ways to do that, I have suggested they might find inspiration in the insight President John F. Kennedy came to after surviving the most dangerous crisis in recorded history, the Cuban Missile Crisis of 1962. Kennedy and Khrushchev had stood eyeball to eyeball in a confrontation JFK believed had a one-in-three chance of ending in a nuclear war that would have killed hundreds of millions of people. Sobered by that experience, he began a serious search for a better way forward. Eight months later, just before he was assassinated, in one of the most significant speeches about international affairs of his career, he proposed that hereafter, the U.S. goal in relations with the Soviet Union should be to build “a world safe for diversity.”¹²

WHAT DID JFK MEAN BY A “WORLD SAFE FOR DIVERSITY”?

That would mean, [JFK] understood, transforming American thinking about what the U.S. required of its “deadliest” adversary. In a feat of rhetorical jujitsu, he stood former U.S. president Woodrow Wilson’s call for a “world safe for democracy” on its head. More importantly, he rejected its Cold War analogue of which he had been a leading advocate. Rather than demanding that the U.S. bury the Soviet Union, the U.S. should now live and let live-in a world of diverse political systems with diametrically opposed values and ideologies. In that future, the two rivals could compete vigorously-but only peacefully-to demonstrate whose values and system of governance could best meet the needs of its citizens.¹³

¹² <https://www.globaltimes.cn/page/202012/1209820.shtml>.

¹³ Graham Allison, “JFK’s Clue for U.S.-China Relations.” *China Daily*, December 17, 2018.

JFK WAS ORIGINALLY A HARDENED, EMOTIONALLY COMMITTED “COLD WAR WARRIOR.” WHY DID HE CHANGE HIS MIND SO DRAMATICALLY?

The experience of existential nuclear danger. He really believed that the confrontation in which he had stood eyeball-to-eyeball with the Soviet leader Nikita Khrushchev could have ended in nuclear Armageddon. Having survived, as he gave thanks, he vowed that hereafter he would do everything in his power to ensure that neither he nor any of his successors would ever have to do that again. He internalized the incandescent insight Ronald Reagan later captured best in his favorite one liner: “a nuclear war cannot be won and must therefore never be fought.”¹⁴

WHAT RELEVANCE DOES JFK’S INSIGHT HAVE FOR THE US-CHINA RELATIONSHIP TODAY?

[JFK] argued that we recognize that “in the final analysis, we all inhabit this small planet. We all breathe the same air. We all cherish our children’s future. And we are all mortal.” And thus, he concluded, while never “being blind to our differences, let us also direct attention to our common interests and to the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity.”

It was a profound thought. It required, in effect, embracing simultaneously two almost contradictory propositions. But over the decades that followed, the two countries with fundamentally incompatible political philosophies found ways to avoid military confrontations as they engaged in fierce but peaceful competition.

It is instructive to consider the similarities between Kennedy’s idea and former premier Zhou Enlai’s “Five Principles of Peaceful Coexistence” enshrined in China’s Constitution: mutual respect for each other’s territorial integrity and sovereignty; mutual non-aggression; mutual noninterference in each other’s internal affairs; equality and cooperation for mutual benefit; and peaceful coexistence. President Xi Jinping has affirmed that

¹⁴ Graham Allison, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.

these bedrock principles “constitute the cornerstone of China’s foreign policy.”

Taken together, these two streams of thought could inform a joint effort by U.S. and Chinese leaders to develop a new strategic concept. One that channels the “Thucydidean” rivalry toward a new form of peaceful competition that preserves both countries’ vital national interests and prevents them from falling into a war that could destroy what they value most.¹⁵

CAN CHINA’S CONCEPT OF A “NEW THEORY OF GREAT POWER RELATIONS” OFFER A WAY OUT OF THUCYDIDES’S TRAP?

[A]s President Xi Jinping frequently says, the challenge for China, and the challenge for the U.S. and China, is to build a new form of great power relations. And that if we were successful in building a new form of great power relations, we could avoid the Thucydides’s Trap. As somebody who works directly for President Xi said to me, “Why do you think President Xi talks about a new form of great power relations? What’s wrong with the old form?” He said the reason why is because we know the old form follows in the footsteps that have been treaded by so many different countries over the centuries of history to a conflict, often a catastrophic conflict, and that’s not where we want the U.S.-China relationship to go. So, in order to prevent that, we need to have a new form of great power relations.¹⁶

As I wrote shortly after China made this proposal [for a new form of great power relations], if this is meant as a banner under which a joint effort by the U.S. and China would work to define the content of a “new” form of relations, I applaud the concept. As someone who works directly for President Xi Jinping explained to me in a conversation in Beijing: why does China call for a “new” form of great power relations? Answering his own question, he said: because Xi understands that the old form of rivalry between great powers has so often led to war. He went on to note

¹⁵ Graham Allison, “JFK’s Clue for U.S.-China Relations.” *China Daily*, December 17, 2018.

¹⁶ Graham Allison, “How to Escape the Thucydides’s Trap” speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

that the reason Xi talks so often about Thucydides's Trap—and specifically about the necessity to avoid it—is that he has studied the historical record. Indeed, China's leadership has made its own study of the cases I analyze in my book *Destined for War: Can the U.S. and China Escape Thucydides's Trap?* They understand what typically happens when a rising power threatens to displace a ruling power. That is, he said, precisely the reason China has called for a “new” type of relationship.¹⁷

HOW CAN THE U.S. AND CHINA USE SHARED INTERESTS TO REDEFINE THEIR RELATIONSHIP?

As they develop [a new concept of the relationship between the U.S. and China], [Xi and Biden] could find inspiration in the suggestion President Reagan made to Soviet President Gorbachev in the final years of the Cold War. During a private walk with only Presidents Reagan and Gorbachev and their translators present, Reagan posed a question: If planet Earth were invaded by hostile Martians, how would the Soviet Union and the United States respond? Initially, the Russian interpreter misunderstood Reagan, and his translation raised eyebrows: Was Reagan telling Gorbachev that Martians had just invaded Earth? After the confusion was cleared up, Reagan pursued the question. His purpose was to underline the core interests that otherwise deadly adversaries shared.

Ask Reagan's question today: do the U.S. and China today face threats analogous to an alien invasion—challenges so severe that both sides are compelled to work together? One does not have to stretch too far to answer affirmatively. Five “mega-threats” loom above all: nuclear Armageddon, nuclear anarchy, global terrorism, climate disruption, and pandemics. In confronting each of these, the vital national interests the two powers share are much greater than the national interests that divide them.

To meet these challenges, both governments will have to craft a strategy that passes what F. Scott Fitzgerald defined as the test of a first-class mind. In Fitzgerald's words, it is “to hold two contradictory ideas in one's head at the same time and still function.” For the U.S., China is at one and the same time the fiercest rival the U.S. has ever seen, and also a

¹⁷ <https://www.globaltimes.cn/page/202012/1209820.shtml>.

nation with which the U.S. will have to find ways to survive together to avoid dying together.¹⁸

WHAT CONCRETE STEPS COULD BE TAKEN TO START REDEFINING THE RELATIONSHIP?

I think, the Shanghai Communiqué identified some fundamental foundations for the establishment of relations between the U.S. and China. And they were largely a reiteration of the foundations, the foundational concepts in the UN Charter that China continues repeating, but they deserve to be repeated. They are called sovereignty, independence, territorial integrity, and non-interference in internal affairs. These are principles that the UN Charter laid down, but they are reflected in the Shanghai Communiqué. The biggest add in terms of the relationship between China and the U.S. was the proposition that there's one China, that the parties on both sides of the strait agree on that proposition, and that ultimately, as we saw with normalization of relations, that Beijing is the capital of that China. I think the difficulty has been that as the decades have gone on, and the circumstances have changed in China, and the circumstances have changed in Taiwan, and the circumstances have changed to some extent in the U.S. and the world, the Shanghai Communiqué needs to be substantially upgraded and revised. And I would say that would be a great undertaking for a Biden and Xi administration going forward. And I don't think it's simply enough to restate what the Shanghai Communiqué stated, but to try to take account of the new realities.¹⁹

¹⁸ <https://www.globaltimes.cn/content/1209820.shtml>.

¹⁹ Graham Allison, "The Future of Great Power Relations: How Can the US and China Co-exist?" CCG Global Dialogue with Henry Huiyao Wang, March 3, 2022.

IS IT REALLY POSSIBLE FOR THE U.S. AND CHINA TO COMPETE AND COOPERATE AT THE SAME TIME?

The possibility that nations could simultaneously compete ruthlessly, on the one hand, while cooperating intensely, on the other, sounds to diplomats like a contradiction. In the world of business, however, it is called life.²⁰

So Apple and Samsung, these companies are vicious competitors selling smart phones, and actually Samsung has beat apple with the current race for the selling of smart phones. But also Samsung is Apple's biggest supplier. So they are partners in some respects and rivals.²¹

Managing a relationship that is simultaneously competitive and cooperative requires vigilance, judgment and agility in adapting. But if, as we believe the evidence shows, technologies on a small globe have left the United States and China with two—and only two—options, we believe they can find ways to coexist, however uncomfortably, if their only alternative is mutual destruction.²²

Could a rivalry partnership in a world safe for peaceful competition between diverse political systems serve as the starting point for a new strategic concept for managing the dangerous dynamic between China and the United States today? Rivalry, indeed intense rivalry, is inevitable. But if the brute fact is that neither can kill the other without simultaneously committing suicide, then intense competition is a strategic necessity. Creating a grand strategy that combines competition and cooperation will require a leap of strategic imagination as far beyond current conventional wisdom as the Cold War strategy that emerged over the four years after Kennan's Long Telegram was from the Washington Consensus in 1946. But that awesome undertaking can be informed by reflection on Kennedy and the Song Dynasty.²³

²⁰ Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August 2020.

²¹ Graham Allison, "How to Escape the Thucydides's Trap" speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019.

²² Graham Allison and Eric Schmidt, "Is China Beating the U.S. to AI Supremacy?" Paper, August 2020.

²³ Graham Allison, "Could the United States and China Be Rivalry Partners?" *The National Interest*, July 7, 2019.

ON PRACTICAL LESSONS FROM THE COLD WAR

Professor Allison is a leading authority on decision making during the Cold War, in particular for his 1971 book, Essence of Decision: Explaining the Cuban Missile Crisis. Drawing on this historical scholarship, in addition to JFK's insight on the need to build a "world safe for diversity," Professor Allison also proposes other practical lessons from the Cold War that can be applied to U.S.-China relations today. He discussed some of these lessons from the Cold War in his dialogue with Li Chen and I in 2021 and has elaborated on them in several articles.

The Cold War started with the idea that these are two systems inherently so incompatible, that one will have to destroy the other, and that would normally lead to war. But initially, because the U.S. and the Soviet Union were both exhausted from World War II, and eventually, because both sides acquired nuclear arsenals, [both sides] concluded that war was not an option. So, how about having a "war" but don't use bombs and bullets with uniformed combatants. And in that so-called Cold War, early on, there emerged a set of constraints, some of which were implicit, some of which were explicit. And then, eventually, we discovered that we would have to coordinate and constrain, but also communicate very quickly and even cooperate in order to prevent things from getting out of control. I think the lessons from that set of experiences, even though the current rivalry between U.S. and China is very different, nonetheless can be very instructive.²⁴

Develop and Maintain Channels for Communication

[E]ven in the deadliest era or days of the Cold War, we were keen to have thick conversations and communication between our leaders. Reagan was often criticized by his conservative Republican colleagues for wanting to spend so much time talking to his Soviet counterparts. He said it's very important to talk to them because a nuclear war cannot be won, and therefore must never be fought. He was keen to negotiate with his Soviet counterpart, even to reach arms control agreements in which the US would forego doing something Americans wanted to do, as the price

²⁴ Graham Allison, "Thucydides's Trap Revisited: Prospects for China-US Relations." CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

for getting the Soviet Union to forego the thing that we did not want them to do.

In every one of those cases, there was a problem of trust, so you would only agree on things that you could independently verify. But this process over time stabilized to a degree and made it possible to avoid lots of potential crises that could have gone out of control—which some almost did, in the case of the Berlin Crisis or the Cuban Missile Crisis. But I think there is no reason why, in the rivalry between the U.S. and China, we shouldn't pick up, dust off and adapt all of the lessons that we learned from that earlier period about the necessity for communication at many levels, for thick communication, for crisis management procedures, even for crisis prevention procedures.²⁵

In a surge of initiatives, the Kennedy administration established a hotline between Washington and Moscow “to avoid on each side the dangerous delays, misunderstandings, and misreadings of the other's actions which might occur at the time of crisis.”²⁶

Constrain Deployments of Particular Weapons

[The U.S.] announced a unilateral moratorium on atmospheric tests of nuclear weapons to jumpstart negotiations that led within a year to the Limited Test Ban Treaty; and began negotiations that culminated in the Nuclear Nonproliferation Treaty, slowing the growth of nuclear weapons states.²⁷

Establish “Rules of the Road”

The two parties also further clarified and extended what Kennedy called the “precarious rules of the status quo,” including: no use of nuclear weapons, no bullets or bombs fired by uniformed American or Soviet combatants against each other, and no surprises within the adversary's sphere of influence. Within these parameters, the two adversaries would continue to compete vigorously on every other dimension, including

²⁵ Graham Allison, “Thucydides's Trap Revisited: Prospects for China-US Relations.” CCG Global Dialogue with Henry Huiyao Wang and Chen Li, April 6, 2021.

²⁶ Graham Allison, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.

²⁷ Graham Allison, “Could the United States and China Be Rivalry Partners?” *The National Interest*, July 7, 2019.

demonstrating which society's values and system of government best fulfill its objectives.²⁸

The United States and China will have to develop their own rules of the road in order to escape Thucydides's Trap. These will need to accommodate both parties' core interests, threading a path between conflict and appeasement. Overreacting to perceived threats would be a mistake, but so would ignoring or papering over unacceptable misbehavior in the hope that it will not recur. In 1996, after some steps by Taipei that Beijing considered provocative, China launched a series of missiles over Taiwan, prompting the United States to send two aircraft carrier battle groups into harm's way. The eventual result was a clearer understanding of both sides' redlines on the Taiwan issue and a calmer region. The relationship may need additional such clarifying moments in order to manage a precarious transition as China's continued economic rise and new status are reflected in expanded military capabilities and a more robust foreign posture.²⁹

Cooperate on Crisis Prevention and Crisis Management

So, joint actions in crisis prevention. Asking: how could Taiwan do something that drags us into war? And then considering today, what we could do now, in advance of that, to prevent that from happening? Asking, how could events in North Korea drag the U.S. and China into a war? What could we do today to deal with that? How could an accident in the South China Sea produce an escalation? What could we do today to deal with that? Basically identify paths to war, crisis prevention, and finally crisis management, prepare for crisis, because we know despite our best efforts to prevent crisis, some stuff will happen. And so when stuff happens, you want to have established lines of communication. You want lines of communication at multiple levels. You would like to have military-to-military conversation so that you're able to talk very candidly. Those are three elements of what would essentially be of managing a condition.³⁰

²⁸ Graham Allison, "Could the United States and China Be Rivalry Partners?" *The National Interest*, July 7, 2019.

²⁹ Graham Allison, "The Cuban Missile Crisis at 50." *Foreign Affairs*, July/August 2012. <https://www.foreignaffairs.com/articles/cuba/2012-07-01/cuban-missile-crisis-50>.

³⁰ Graham Allison, "How to Escape the Thucydides's Trap" speech given at the 2019 Harvard Alumni China Public Policy Forum, Center for China and Globalization, Beijing, March 22, 2019. <https://www.chinausfocus.com/foreign-policy/escaping-the-thucydides-trap>.

Recognition of the real risks of incidents or accidents that have over the course of history dragged great powers into unwanted wars puts a premium on crisis prevention and crisis management. As someone who was deeply engaged in the Cold War with the Soviet Union, Biden is familiar with best practices developed over those decades. These begin with joint efforts to identify potential crises, tabletop exercises to explore responses, circuit breakers that prevent automatic escalation, and, most importantly, robust channels of communication.³¹

Give Leaders Adequate Time and Space to Make Crucial Decisions

[Another] lesson [the Cuban Missile Crisis] teaches has to do not with policy but with process. Unless the commander in chief has sufficient time and privacy to understand a situation, examine the evidence, explore various options, and reflect before choosing among them, poor decisions are likely. In 1962, one of the first questions Kennedy asked on being told of the missile discovery was, How long until this leaks? McGeorge Bundy, his national security adviser, thought it would be a week at most. Acting on that advice, the president took six days in secret to deliberate, changing his mind more than once along the way. As he noted afterward, if he had been forced to make a decision in the first 48 hours, he would have chosen the air strike rather than the naval blockade—something that could have led to nuclear war.

In today's Washington, Kennedy's week of secret deliberations would be regarded as a relic of a bygone era. The half-life of a hot secret is measured not even in days but in hours. Obama learned this painfully during his first year in office, when he found the administration's deliberations over its Afghanistan policy playing out in public, removing much of his flexibility to select or even consider unconventional options. This experience led him to demand a new national security decision-making process led by a new national security adviser. One of the fruits of the revised approach was a much more tightly controlled flow of information, made possible by an unprecedented narrowing of the inner decision-making circle.³²

³¹ <https://www.globaltimes.cn/content/1207739.shtml>.

³² Graham Allison, "The Cuban Missile Crisis at 50." *Foreign Affairs*, July/August 2012.

As Professor Allison points out in the same article, today, leaders are under immense pressure to find creative solutions to a daunting array of challenges. Tiredness certainly does not help in these situations, as recognized by Bill Clinton, who once said that “Every important mistake I’ve made in my life, I’ve made because I was too tired.” To avoid the dangers of burnout at the top, Professor Allison reminds us that:

[...] Creating the time and the space needed to recharge, refuel, and reflect is essential for the human operating system to function optimally. That is not a systemic bug; it’s a powerful feature – one that leaders today should be using to its fullest extent.³³

³³ Graham Allison, “The Cuban Missile Crisis at 50.” *Foreign Affairs*, July/August 2012.

AFTERWORD: BEYOND THUCYDIDES'S TRAP

If you can revive the ancient and use it to understand the modern, then you're worthy to be a teacher.

—Confucius, *The Analects*¹

WHAT OTHER TRAPS SHOULD WE BE AWARE OF IN CHINA-US RELATIONS?

While Thucydides's Trap has become the most well-known “trap” theorized for China-U.S. relations, scholars have also proposed other traps that we should be aware of, lest we become too focused on the risk of outright war between the great powers and ignore other risks.

For example, Joseph Nye, who developed the concept of “soft power” and is a colleague of Professor Allison at Harvard, argues that rather than a violent clash between the great powers, a greater danger arising from the shifting balance of power may be the “Kindleberger Trap.”² This concept is named after Charles Kindleberger, one of the leading architects of the Marshall Plan. He argued that the disasters that occurred in the 1930s

¹ Original text from *The Analects*: “温故而知新，可以为师矣。”

² Joseph Nye, “The Kindleberger Trap.” Project Syndicate, January 9, 2017.

were caused by the U.S.' failure to step up and provide global public goods after it had replaced Britain as the leading power.

Today, the relative decline of U.S. power and the inward turn that was initiated under President Trump has contracted the provision of global public goods. Against this backdrop, China has accelerated moves to play a more prominent role in global governance, playing a larger role in multilateral institutions and launching its own initiatives to spur global development, such as the Belt and Road Initiative and Asian Infrastructure Investment Bank. However, these efforts have met resistance in some quarters such as the U.S. According to the Kindleberger Trap theory, the salient risk is that amidst the power transition and rivalry between the U.S. and China, great powers will not act to provide vital global public goods such as a stable climate or financial stability.

Another "trap" that has been proposed is the "Churchill Trap." Scholar Yuan Yang argues that the Thucydides's Trap exaggerates the risk of war breaking out between the rising power and the ruling power in the contemporary age. Instead, Yang argues that there is a greater danger of falling into the "Churchill trap" and should take this more seriously.³ By the Churchill Trap, Yuan Yang means repeating the mistakes made during the Cold War between the U.S. and the Soviet Union, which led to a long-term confrontation between the superpowers and divided the international system into a bipolar system.

Yang argues that in an age of nuclear weapons, the common desire to prevent all-out war will prevail between the superpowers, making the Churchill trap the more important and relevant trap we should consider. Yang also argues that even if China and the U.S. escape the Thucydides's Trap, this will only be followed by a fatal fall into the Churchill Trap unless a different kind of great power relationship can be developed as an alternative to a hegemonic transition through war or a prolonged Cold War-esque confrontation.

³ Yuan Yang, "Escape both the "Thucydides Trap" and the "Churchill Trap": Finding a Third Type of Great Power Relations under the Bipolar System." *The Chinese Journal of International Politics* 11(2) (Summer 2018), pp. 193–235. <https://doi.org/10.1093/cjip/poy002>.

TOO MUCH THUCYDIDES? ALTERNATIVE EXAMPLES FROM CHINESE HISTORY

Long before Professor Allison coined “Thucydides’s Trap,” the Peloponnesian War has loomed large in the minds of Western strategic thinkers as a historical reference point to understand contemporary events. In 1947, George Marshall said that “I doubt seriously whether a man can think with full wisdom and with deep convictions regarding certain of the basic international issues today who has not at least reviewed in his mind the period of the Peloponnesian War and the Fall of Athens.” Thucydides remained an important intellectual touchstone in Washington throughout that prolonged standoff between the U.S. and the Soviet Union and was periodically resuscitated again after the Cold War ended for various different reasons to support various different arguments.⁴ The continued grip of Thucydides over the strategic imagination of some Western thinkers led Joseph Lane to note, “Whenever we get a new war, we get a new Thucydides.”⁵

While Thucydides’ insights are a valuable contribution to understanding China-U.S. competition, many scholars argue that we should not rely too much on one ancient Greek thinker and wonder if his ancient Eurocentric and Mediterranean-centric models of international relations are really the best model to understand China-U.S. relations in the twenty-first century. In 2015, an article in the *China Daily* titled “Thucydides Trap Not Etched in Stone” urged Chinese scholars not to rely on Thucydides’s Trap and instead find a concept or theory from China’s long history to describe future China-U.S. relations while laying emphasis on the new type of major-power relationship.⁶

As covered in Chapter 4, Professor Allison has also taken up the mission to look into the history of China and other non-western regions for ideas on how to escape Thucydides’s Trap, and has identified the

⁴ See, for example, Victor Davis Hanson, “A Voice from the Past: General Thucydides Speaks About the War,” in *National Review Online*, 27 November 2001, reproduced in Victor Davis Hanson, *An Autumn of War: What America Learned from September 11 and the War on Terrorism* (New York: Anchor Books, 2002).

⁵ J.H. Lane Jr., “Thucydides Beyond the Cold War: The Recurrence of Relevance in the Classical Historians.” *Poroi* 4(2) (2005), pp. 52–90.

⁶ http://www.chinadaily.com.cn/opinion/2015-08/20/content_21655686.htm.

Chanyuan Treaty, under which the Song and the Liao agreed to become “rivalry partners” as one useful example.

In the spirit of Professor Allison’s call to use applied history to guide sound and pragmatic policymaking in the present, it is important that Chinese scholars also work to identify suitable historical examples and draw out policy implications for China-U.S. relations today. By studying the past and failures, shortcomings, and wisdom of our distant forefathers, we might gain some insights to forge a new and more peaceful path forward. While it is beyond the scope of this book to wade into this quest in any depth, I would like to briefly mention a few examples that might warrant further exploration or provide food for thought.

ZUOZHUAN AND THE JIN-CHU RIVALRY

Turning the clock back to the Spring-Autumn period, the *Zuozhuan* stands out as a Chinese counterpoint to *The History of the Peloponnesian War* and also happens to be roughly contemporaneous with Thucydides. *Zuozhuan*, one of China’s oldest historical texts, describes the era of the decline of the Zhou dynasty from 722 to 468 BCE.

Among the complex accounts of the schemes of various rulers, officials, and generals, one episode that has echoes of today’s China-U.S. relationship is the prolonged contest for dominance between the states of Jin and Chu that took place from around 632 to 546 BCE. While the analogy has many flaws, there are some aspects in which the Jin-Chu rivalry may illuminate our understanding of current China-U.S. relations and in some ways is a more fitting comparison than the rivalry between Athens and Sparta in ancient Greece.

The historical narrative in the *Zuozhuan* highlights the multi-faceted challenges that both Jin and Chu faced in trying to navigate a multi-state system that neither wanted to destroy or overthrow. As the power and authority of the Zhou court weakened in the Spring and Autumn period, there was little central control over the constituent states, resulting in near-constant tension and competition between them. This system came to exhibit some traits similar to multipolarity as dozens of states vied for power and survival, practicing balance of power politics, with Jin and Chu as two of the most powerful.

When the state of Chu was on the rise, Jin was a more established power that had developed and become influential in its location just north of the Yellow River within the core Zhou system. Being based on the

southern Yangtze River, the state of Chu was something of an outsider to the established system. However, as Chu developed and became more powerful, it took on many of the Zhou's governing norms, even to the point where other states start to see it as a supporter of the established order and a rightful defender of Zhou legitimacy. In this system, there were strong incentives to uphold the rules and norms that had moderated the behavior of states under the old Zhou governing tradition, which tended to preserve a degree of cooperation and coexistence and put limits on the scale of warfare.

As John Sullivan points out, there are certain parallels here with contemporary geopolitics.⁷ Jin, somewhat similar to the U.S., had been pivotal in shaping and leading the existing system and did not want to be displaced from its dominant position in the hierarchy. Likewise, some similarities can be seen between the Chu state and China, which initially existed somewhat outside the international system, but became more integrated as it developed, adopting global norms and then helping to shape and modify the system.

In this rivalry, neither Jin nor Chu was in a position of being able to destroy their rival, but they also did not want for the other side to gain a sufficient advantage that they might be able to rally the other states to threaten its own survival. It was more a contest for allegiance rather than survival. In this case, somewhat like the Cold War, aside from three major battles during this period, direct war between the two powers was rather limited and tended to focus on attempts to protect or win the allegiance of less powerful domains, instead of risk a full-scale assault on the home territory of their rival. Like the U.S. and Soviet Union in the Cold War, even during periods of intense tensions, Jin and Chu sought to maintain diplomatic relations and tried to find ways to mitigate conflict.

“XUNCIOUS BREAKTHROUGH”

Xuncius (Xunzi), a Confucian philosopher that lived in the late Warring States period, declared that a set of well-planned manners or actions, as opposed to selfish designs, can help avoid conflicts and facilitate cooperation. This theory is relevant to lead China and the U.S. toward sustainable cooperation, and so Professor Zhang Feng has suggested that the phrase

⁷ <https://warontherocks.com/2020/12/trapped-by-thucydides-updating-the-strategic-canon-for-A-sinocentric-era/>.

“Xuncius Breakthrough” might serve as an Chinese alternative to the idea of Thucydides’s Trap.⁸

THE SONG DYNASTY

All dynasties in Chinese history have lessons for the current age of geopolitics, but the Song Dynasty stands out for two reasons. The first is that the Song were able to secure a long period of peace with their rivals the Liao through the Chanyuan Treaty of 1005. As I discussed with Professor Allison in our CCG Global Dialogue in March 2021, under this treaty, the Song and the Liao agreed to become “rivalry partners” which included some aspects of competition, but also economic cooperation in the form of tribute.

Another lesson from the Song dynasty is that this was a period when China was becoming integrated with the rest of the world through trade, which can be described as an early form of globalization. Indeed, in my discussion with the Yale Historian Valerie Hansen in the CCG Global Dialogue series, we talked about how it was the most globalized place in the world at the time. The experience of the Song dynasty shows how peace and stability are important for globalization to generate prosperity, and how trade can be a bond to link people together, with commercial interests serving as a common denominator to unite people.

THE “SILVER WAY” RATHER THAN THUCYDIDES’S TRAP

In their book *The Silver Way*, Peter Gordon and Juan José Morales suggest looking at the relationship between China and Spain in the sixteenth and seventeenth centuries.⁹ In this case, China was the ruling power, and Spain was a rising power, both in general and in Asia in particular, having established itself in Manila between 1565 and 1571. This encounter gave rise to the Ruta de la Plata (“Silver Way”)—a period of intense commerce between China and Spanish America, served by trade routes that spanned across four continents, linked via the medium of

⁸ Zhang Feng et al., “Thucydides Trap Not Etched in Stone.” *China Daily*, August 20, 2015, available at www.chinadaily.com.cn/opinion/2015-08/20/content_21655686.htm.

⁹ Peter Gordon and Juan José Morales, *The Silver Way: China, Spanish America and the Birth of Globalization, 1565–1815*, Penguin China, 2017.

silver. This network of trade and economic cooperation foreshadowed globalization and linkages that stay with us to this day.

During this period, Gordon and Morales point out that, in contrast to Thucydides's Trap that seems to set out binary outcomes (war or no war), the Silver Way suggests a third possibility: an ongoing process of cooperation and globalization which does not lead to either convergence or armed conflict. The two sides integrate but remain apart. Rather than a zero-sum game, the parties are held in a kind of equilibrium, though one that remains subject to uncertainty, disruption, and periodic misunderstandings.¹⁰

LOOKING BACK TO LOOK FORWARD

The brief examples mentioned above are just a tiny fraction of the cases that could potentially be mined from the history of China and other civilizations for clues on how to develop a healthy and peaceful relationship between China and the U.S.. While the risks of China and the U.S. falling into Thucydides's Trap are significant, it is my view that the trap can be avoided if both sides are able to forge a relationship that manages the competitive aspects while emphasizing coordination, dialogue, and cooperation on shared interests. To achieve this, we need to adopt a pragmatic and rational approach to understand and discuss China-U.S. relations from a win-win rather than zero-sum perspective. In this sense, I hope the ideas shared in this book can represent a small step in the right direction by offering some food for thought and avenues to explore further for solutions to escape Thucydides's Trap.

¹⁰ <https://thediplomat.com/2017/06/the-silver-way-an-alternative-to-thucydides-trap/>.

ABOUT THE CENTER FOR CHINA AND GLOBALIZATION

The Center for China and Globalization (CCG) is a Chinese non-governmental think tank based in Beijing. CCG has been granted the official special consultative status by the Economic and Social Council of the United Nations (ECOSOC) as a non-governmental organization in 2018. In the “2020 Global Go To Think Tank Index” by the University of Pennsylvania Think Tank and Civil Society Program (TTCSP), CCG ranked 64th of the top think tanks worldwide and among the top 50 global independent think tanks. CCG has also been recognized as a “4A non-governmental organization” by Beijing Municipal government civil affairs department.

Founded in 2008 and headquartered in Beijing, the Center for China and Globalization (CCG) is China’s leading global non-governmental think tank. It has more than ten branches and overseas representatives and over 100 full-time researchers and staff engaged in research on globalization, global governance, international economy and trade, international relations, and global migration. CCG is also a national Post-doctoral Programme Research Center certified by the Ministry of Human Resources and Social Security of China.

While cultivating its own research teams, CCG has also built an international research network of leading experts in China and overseas. CCG engages in ongoing research on China and globalization from an international perspective. CCG publishes more than 10 books every year in English and Chinese and a series of research reports. It shares its

research findings with the public and has published hundreds of thousands of related books and reports, which receives hundreds of thousands of website visits annually.

CCG has been involved in promoting many national development and global governance policies. It regularly submits policy recommendations to relevant state agencies and ministries, many of which have been commented on by the central leadership and have served as reference for major decisions made by relevant departments, continually promoting government policymaking and institutional innovation.

ABOUT THE CCG GLOBAL DIALOGUES

The Center for China and Globalization (CCG) is grateful to Professor Allison for participating in the CCG Global Dialogue series in March 2021 and April 2022. These two discussions were an important inspiration and source of materials for this book.

As part of our mission to serve as a bridge between China and the rest of the world, each year, the Center for China and Globalization (CCG) hosts a range of speakers from around the world at its headquarters in Beijing. We have also worked to build various bespoke channels and platforms to enhance dialogue between scholars, business leaders, policymakers, and young people from China and abroad. This includes an annual program of seminars, workshops, and flagship events such as the China and Globalization Forum and the Inbound-Outbound Forum. Representatives of the think tank also participate in international events to exchange views with people around the world.

Since the outbreak of COVID-19, in a period when the world was facing a global health and economic crisis that called for dialogue and cooperation, many of the usual channels of interaction between people from different countries closed down. International meetings and diplomatic summits were limited while it became more difficult to hold in-person exchanges with academics, think tank representatives, and business leaders from around the world.

As the pandemic spread and geopolitical tensions rose, there was a greater need than ever for calm, rational discussion to share views, make

sense of the momentous changes that were occurring, and find ways to work together. As life was interrupted for everyone around the world and many countries endured rolling lockdowns, like everyone else, CCG worked to adapt to the new circumstances. We reached out to old friends and new to set up dialogues in a virtual format which allowed us to speak with leading experts around the world from CCG's new multimedia center in Beijing via video link. Although we were often separated by thousands of miles, twenty-first century technology allowed us to converse in real time and even lent a certain "fireside chat" intimacy to our virtual dialogues as participants spoke unscripted and candidly from their own homes and offices in various continents.

Launching the CCG Global Dialogue Series gave us the opportunity to converse with experts from different countries and disciplines that could help us put current events in context and explore solutions to our shared challenges. The series continued to develop, attracting audiences of hundreds of thousands of viewers in China and abroad.

Since launching the CCG Global Dialogue Series in 2021, the list of participants has grown to include prominent journalists and authors, Nobel laureates, former officials with extensive experience at the highest levels of government and multilateral institutions, and world-renowned scholars in fields such as international relations, economics, and trade. In addition to Professor Allison, this has included figures like Thomas L. Friedman, author and New York Times Op-Ed columnist; Joseph S. Nye Jr., Harvard University Distinguished Service Professor, Emeritus; Martin Wolf, Chief Economics Commentator at the Financial Times; John L. Thornton, Chair Emeritus at the Brookings Institution and Co-Chair of the Asia Society; Wendy Cutler, Vice President at the Asia Society Policy Institute and former Acting Deputy US Trade Representative; Pascal Lamy, President of the Paris Peace Forum and former Director-General of the World Trade Organization; and Kishore Mahbubani, Distinguished Fellow at the Asia Research Institute, National University of Singapore and former Singaporean Ambassador to the UN.

We have found the perspectives that these and other participants have shared with us to be invaluable in helping to understand the trends reshaping our world. The discussions have also generated many ideas as to how we might work together to forge a post-pandemic world that is peaceful, prosperous, and more inclusive. Therefore, we were eager to share these talks in the form of a book so that readers could absorb the insights shared by our speakers, compare and contrast their perspectives,

and enhance their understanding of important issues such as globalization, global governance and multilateralism, the global economy, our shared transnational threats, and China-US relations.

The first volume of this series, which features the full transcript of my March 2021 discussion with Graham Allison, as well as talks with a host of other experts, was released in December 14, 2022, under the title *CCG Global Dialogues: Understanding Globalization, Global Gaps, and Power Shifts in the 21st Century*, published by Palgrave Macmillan. At a time when international politics has become more contentious and polarized than ever, we hope this collection will help readers develop a nuanced and balanced understanding of some of these crucial themes of our times.

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